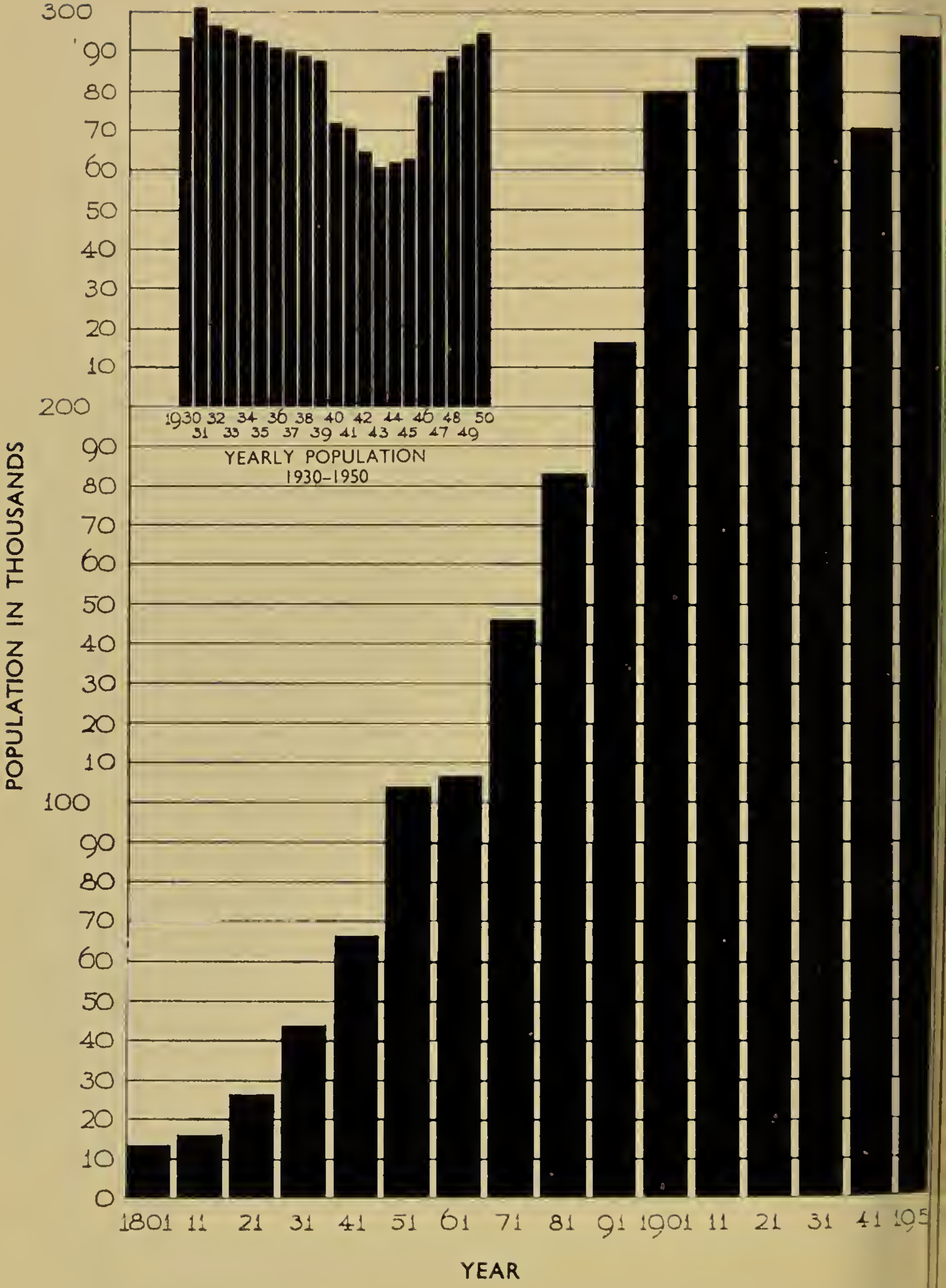
COUNTY BOROUGH OF BRADFORD.

The following are the provisional vital statistics
1951 with comparable figures for 1950.

	1950.	1951.
mated population	294,300	294,300
hs	4,906	4,924
h Rate (per 1000 pop.)	16.7	16.7
lbirths	112	112
lbirth Rate (per 1000 live & stillbirths)	22.3	22.2
hs	4,173	4,424
h Rate (per 1000 pop.)	14.2	15.0
tic Diseases Deaths	44	33
tic Diseases Death Rate (per 1000 pop.)	0.15	0.11
rculosis Deaths - Lungs	92	85
Other Forms	17	17
All Forms	109	102
rculosis Death Rates - Lungs	0.31	0.29
per 1000 pop.) Other Forms	0.06	0.06
All Forms	0.37	0.35
rculosis Notifications - Lungs	249	230
Other Forms	67	58
All Forms	316	288
nt Deaths	185	207
nt Mortality Rate (per 1000 Live Births)	38	42
rnal Deaths	7	6
rnal Mortality Rate (per 1000 Live and Stillbirths)	1.39	1.18



THE POPULATION OF BRADFORD—1801–1950

Fig. 1

The Health of Bradford

1950

THE ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH

JOHN DOUGLAS, M.D., D.P.H.

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Committees

Health Committee

The Lord Mayor

Chairman: Councillor N. Fienburgh, J.P.

Deputy Chairman: Alderman F. Duce, J.P.

Alderman D. Black
,, F. W. Boddy
,, K. Chambers, J.P.
,, W. Leach
,, H. J. White
,, F. G. Woodgate
Councillor F. Badland
A. Barber, J.P.

Councillor A. Crowther
,, W. M. Hird
,, J. N. Horsfall
,, J. McKee
,, R. C. Ruth
,, A. Walker
,, H. R. Walker
,, A. Walton

Councillor G. F. Greenbank

and

Dr. Hanson

Dr. Priestman

Dr. Young

Standing Sub-Committees

General Purposes

The Lord Mayor

Chairman: Councillor N. Fienburgh, J.P.

Deputy Chairman: Alderman F. Duce, J.P.

Alderman K. Chambers, J.P.
,, F. G. Woodgate
Councillor A. Crowther

Councillor R. C. Ruth
,, H. R. Walker
,, A. Walton

Maternity and Child Welfare

The Lord Mayor
Chairman: Councillor N. Fienburgh, J.P.
Deputy Chairman: Alderman F. Duce, J.P.

Alderman D. Black
,, K. Chambers, J.P.
,, J. F. McHugh

Councillor F. Badland
,, J. N. Horsfall

and

Mrs. England
Mrs. Leach
Mrs. McDermott

Mental Welfare

The Lord Mayor
Chairman: Councillor N. Fienburgh, J.P.
Deputy Chairman: Alderman F. Duce, J.P.

Alderman Black
Councillor F. Badland

Councillor A. Barber, J.P.
,, W. M. Hird
,, R. C. Ruth

and

Mrs. Titterington
Miss Wedgeworth
Mr. A. Hudson

Care and After-Care

The Lord Mayor
Chairman: Councillor N. Fienburgh, J.P.
Deputy Chairman: Alderman F. Duce, J.P.

Alderman F. W. Boddy
,, J. F. McHugh

Councillor J. N. Horsfall
,, J. McKee
,, A. Walton

and

three representatives of three organisations

J. Phillips, J.P.
D. Smith
A. F. Mombert, J.P.

Education Committee

The Lord Mayor

Chairman: Alderman K. Chambers, J.P.

Deputy Chairman: Alderman F. W. Boddy

Alderman J. Barber, J.P.
,, F. Duce, J.P.
,, H. W. Semper, J.P.
,, H. J. Wilson, J.P.
,, F. G. Woodgate
Councillor J. Backhouse
,, A. Barber, J.P.
,, N. Byatt
,, E. Chatterton
,, A. E. Connell
,, A. N. Connell
,, A. Crowther
,, N. W. Durrant
Mrs. Briggs
Mrs. Leach

Councillor N. Fienburgh, J.P.
,, J. T. Garnett
,, F. H. Greenwood
,, J. N. Horsfall
,, F. Huntley
,, J. McKee
,, G. Oates
,, A. Pickersgill
,, R. C. Ruth
,, J. W. Taylor
,, J. L. Tyson
,, R. Weatherhead
,, W. J. Whiteoak
Mrs. Lewis
Mr. Geo. G. Stansfield

Joint Education and Health Sub-Committee

The Lord Mayor

Chairman: Councillor N. Fienburgh, J.P.

Alderman F. W. Boddy
,, K. Chambers, J.P.
,, F. Duce, J.P.

Councillor F. Badland
Mrs. Briggs
Mrs. Leach

Alderman F. G. Woodgate

Section I

Social Circumstances and Vital Statistics

- POPULATION
- METEOROLOGY
- BIRTHS
- MARRIAGES
- DEATHS
- INFANTILE MORTALITY
- STILLBIRTHS
- MATERNAL MORTALITY

AGE PROPORTION OF POPULATION

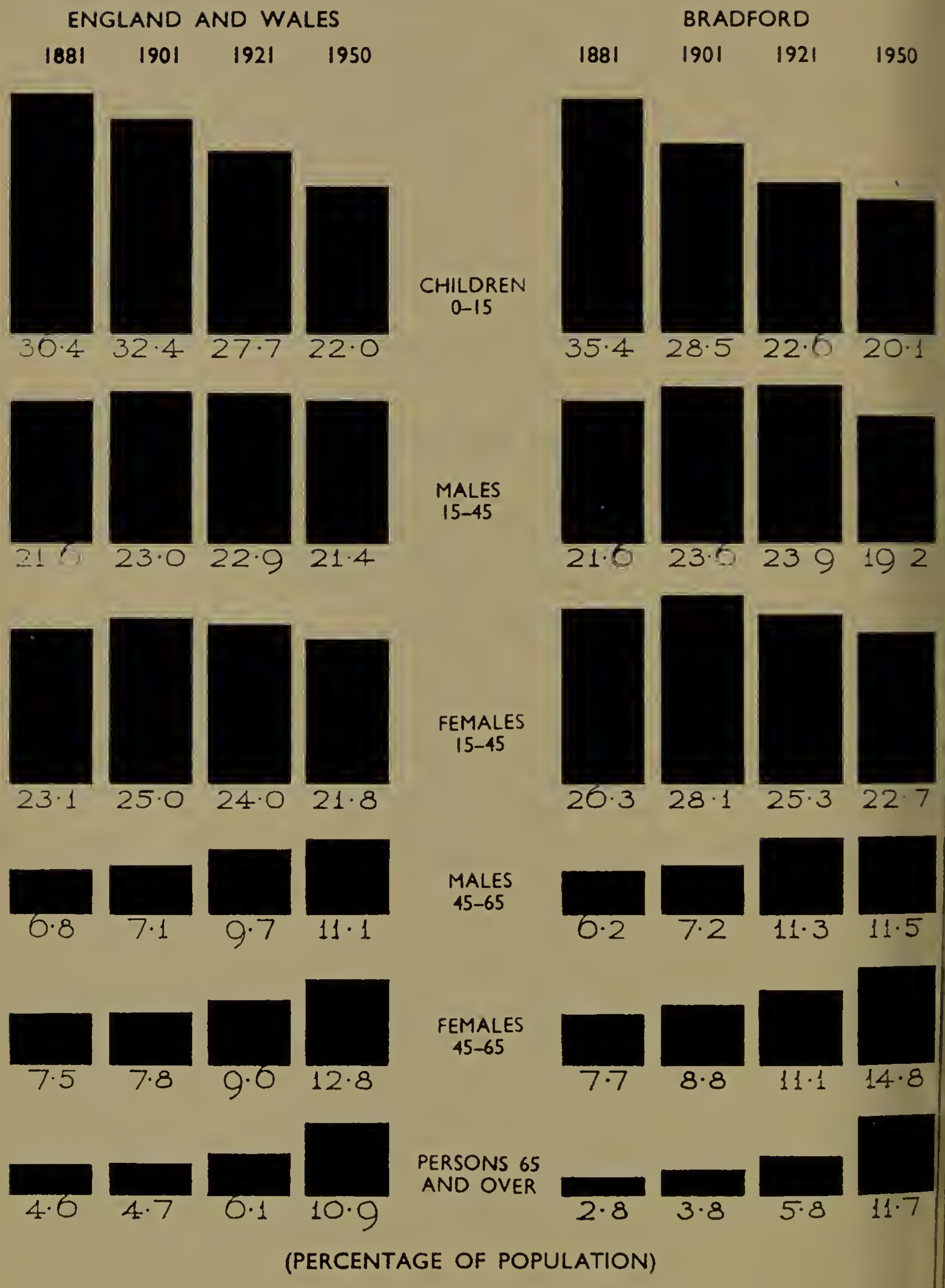


Fig. 2

Social Circumstances and Vital Statistics

Population and Social Circumstances of the Area

The last official census of the population was made in 1931, when there were 298,041 persons resident in the area. This is the highest figure recorded and marks the peak of a remarkable increase during 130 years from 1801, when the population was 13,000. Since 1931 the population has tended to decrease and the Registrar General's estimate for 1939 was 287,000. There were considerable fluctuations during the war years; the lowest estimate of civilian population being 260,000 in 1943. Since 1945 there has been a gradual increase, and the figure for 1950 is 294,300; a little above that for the 1939 estimate, and 2,700 above the 1949 figure.

In common with the rest of the country, there is a change taking place in the age constitution of the population. This is clearly shown in Figure 2. The swing in the age structure from young to old is creating medico-sociological problems which become increasingly difficult to solve.

Mr. C. W. Llanwarne, the Manager of the Employment Exchange, has kindly supplied me with the following table which gives the number of persons employed in various occupations.

NUMBER OF NEW CLAIMS FOR SICKNESS BENEFIT
BRADFORD, 1950

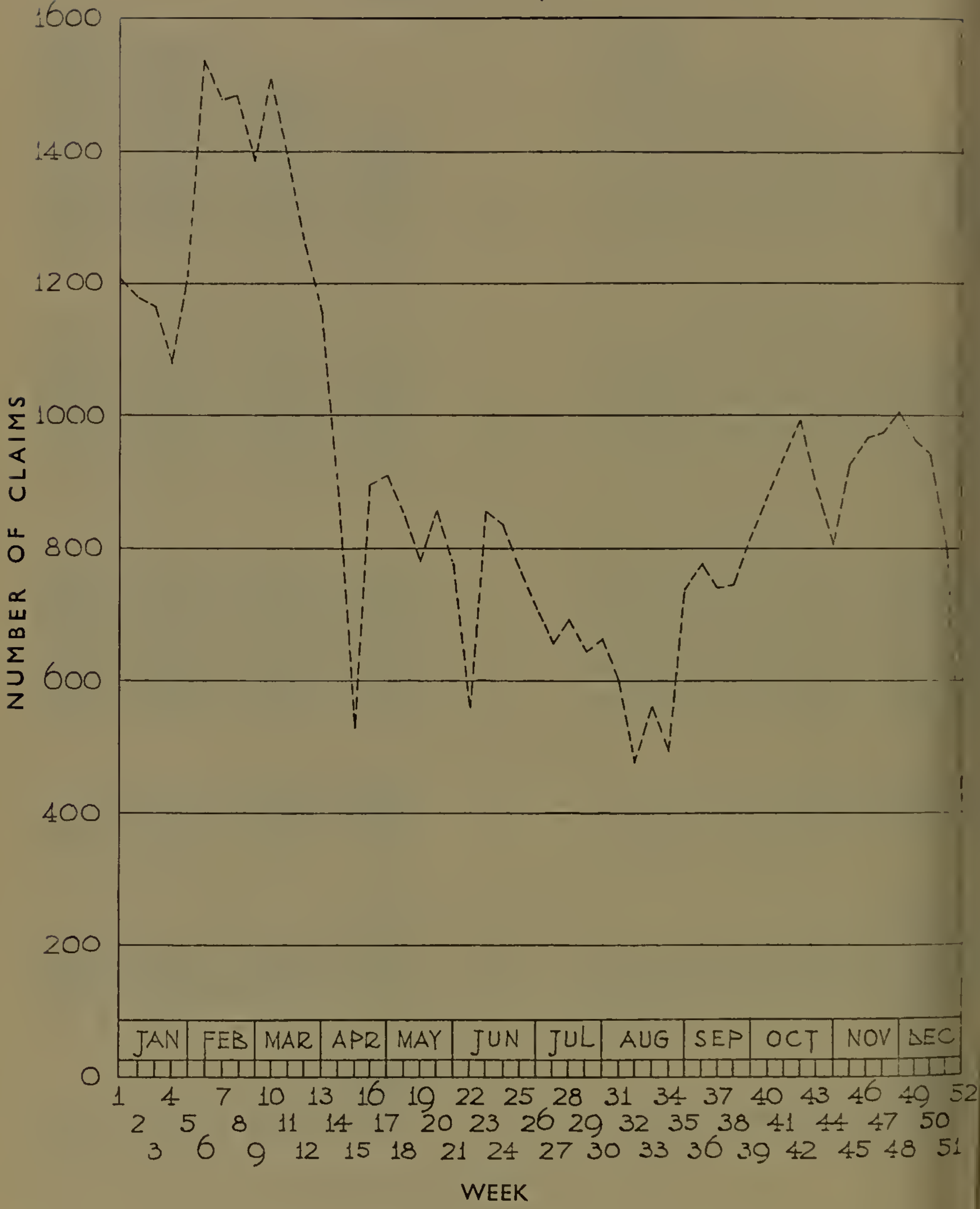


Fig. 3

TABLE 1

Bradford Employment Exchange

Number of persons in Employment in June 1950 *according to National Insurance Cards exchanged*

Industry	Juveniles under 18 (included in Cols. 4 to 6)		Males aged 15 & over	Females aged 15 & over	Total M. & F. 15 & over
(1)	(2)	(3)	(4)	(5)	(6)
Textiles	1,188	2,200	25,131	27,310	52,441
Distribution	720	888	11,448	7,572	19,020
Engineering, Shipbuilding, etc.	448	164	10,320	2,250	12,570
Transport, etc.	248	102	8,065	1,135	9,200
Public Administration	36	100	3,987	2,074	6,061
Building and Construction	408	112	4,657	171	4,828
Clothing	56	504	790	3,036	3,826
Paper and Printing	144	260	2,111	1,707	3,818
Vehicles	96	16	1,420	161	1,581
Food, Drink and Tobacco	100	40	2,113	993	3,106
Professional Services	156	400	2,736	4,886	7,622
Wood and Cork	204	24	1,648	323	1,971
Gas, Electricity, Water	56	20	3,005	201	3,206
Metal Goods	60	12	1,184	194	1,378
Metal Manufacture	16	8	1,545	137	1,682
Chemicals	16	24	712	316	1,028
Insurance, Banking and Finance	36	52	976	606	1,582
Mining and Quarrying	20	8	298	34	332
Other Manufacturing Industries	4	20	194	143	337
Leather	—	4	157	93	250
Agriculture	44	4	283	42	325
Entertainment, Sport and Miscellaneous	116	300	2,722	6,957	9,679
Others not included in above	12	—	76	18	94
Totals	4,182	5,262	85,578	60,359	145,937

*Number of Unemployed mid-*1950

Men	416
Women	108

Approximately fifty per cent of the whole population is engaged in remunerative employment. A large number of these workers are females, to the extent, in fact, of 41·36 per cent of the total force. The corresponding figure for England and Wales is 31·32 per cent. This is due to exceptional opportunities for women presented in the textile industry.

By the courtesy of the City Treasurer I furnish below an analysis of domestic and other premises in the City.

TABLE 2 *Analysis of Domestic and other premises in the City*

Class	Number of Hereditaments	
	Number	Percentage of total %
A. DOMESTIC		
1—Houses and Flats (including Garages):		
(*a*) R.V. not exceeding £10	45,927	41·552
(*b*) R.V. exceeding £10 but not exceeding £13 . .	21,933	19·843
(*c*) ,, ,, £13 ,, ,, ,, £20 . .	16,870	15·263
(*d*) ,, ,, £20 ,, ,, ,, £30 . .	4,792	4·335
(*e*) ,, ,, £30 ,, ,, ,, £40 . .	921	0·833
(*f*) ,, ,, £40 ,, ,, ,, £50 . .	417	0·377
(*g*) ,, ,, £50 ,, ,, ,, £75 . .	314	0·284
(*h*) ,, ,, £75 ,, ,, ,, £100 . .	61	0·055
(*i*) ,, ,, £100	33	0·031
	91,268	82·573
B. COMMERCIAL		
2—House-shops (other than "off-licensed" premises shown in B. 4)	2,763	2·500
3—Shop premises	2,762	2·499
4—Premises with "off-licenses"	291	0·263
5—(*a*) Hotels and Boarding Houses (unlicensed) . .	23	0·021
(*b*) Restaurants and Cafes (unlicensed)	70	0·063
6—Offices and Banks	1,762	1·594
7—Warehouses and Stores	2,010	1·818
8—Workshops (non-industrial)	493	0·446
9—Garages (Commercial), Petrol Filling Stations and Car Parks	311	0·282
10—Lock-up Garages (not assessed with houses) . .	3,544	3·206
11—Advertising Stations and Signs	796	0·720
12—Markets	6	0·005
	14,831	13·417

Class	Number of Hereditaments	
	Number	Percentage of total %
LICENSED PREMISES (other than premises with "off-licenses" only, which are included in B. 4 above).		
13—Licensed Houses and Clubs (see Item D. 19 for unlicensed clubs)	496	0·449
14—Hotels and Restaurants (see Item B. 5 for unlicensed hotels and restaurants)	39	0·035
	535	0·484
ENTERTAINMENT AND RECREATIONAL		
15—Cinemas	38	0·034
16—Theatres and Music Halls	4	0·003
17—Sports and Recreation Grounds, Golf and Racecourses	134	0·121
18—Swimming Pools separately assessed (see J. 26 for Baths)	—	—
19—Social Clubs, Public Halls and Community Halls (unlicensed)	114	0·102
20—Other places of Entertainment (including Billiards Saloons, Dance Halls, Pleasure Piers, etc.) ..	38	0·037
	328	0·297
PUBLIC UTILITY		
21—(*a*) Electricity	—	—
(*b*) Ferries	—	—
(*c*) Gas	22	0·019
(*d*) Passenger Transport	24	0·022
(*e*) Water	24	0·022
	70	0·063
EDUCATIONAL AND CULTURAL		
22—Libraries, Museums, Art Galleries, etc.	26	0·024
23—School and Colleges, etc.:		
(*a*) Schools and County Colleges	113	0·102
(*b*) Teachers' Training Colleges	—	—
(*c*) Universities	—	—
	139	0·126

Class	Number of Hereditaments	
	Number	Percentage of total %
G. INDUSTRIAL		
24—(*a*) Mines and Quarries	18	0·016
(*b*) Chemicals	41	0·037
(*c*) Iron and Steel	38	0·034
(*d*) Non-ferrous metals	22	0·020
(*e*) Engineering and Shipbuilding	219	0·198
(*f*) Vehicles	3	0·003
(*g*) Textiles and Leather	1,024	0·927
(*h*) Clothing	69	0·062
(*i*) Food, Drink and Tobacco	89	0·081
(*j*) Manufacture of Wood	61	0·055
(*k*) Paper and Printing	120	0·109
(*l*) Other Manufacturing Industries	345	0·312
(*m*) Building and Contracting	45	0·041
	2,094	1·895
J. MISCELLANEOUS		
26—Public Wash-houses and Baths	13	0·012
27—Cemeteries and Crematoria	5	0·005
28—Sewers and Sewage Works	12	0·011
29—Town Halls and Municipal Offices	13	0·012
30—Hospitals, Clinics, Nursing Homes, etc.	51	0·045
31—Property occupied by the Crown	73	0·067
32—Hereditaments not otherwise classified	1,098	0·993
	1,265	1·145
Total	110,530	100·000

There are about 94,000 dwellings in Bradford, 60 per cent of which have a rateable value not exceeding £13. One third of all the dwelling houses are of the back-to-back type, and of the total number of dwellings 56,830 now have a domestic hot water service, leaving about 40 per cent of the houses still without this amenity. Most of the houses with a domestic hot water supply also have a fixed bath. The provision of a domestic hot water supply and a fixed bath in houses of the back-to-back type is a matter of some difficulty except in the larger types with three bedrooms, in some of which owner-occupiers have, in fact, made a bathroom of the small bedroom.

To compensate for this deficiency in the smaller cottage houses the Baths Committee have, in the past, provided slipper baths at various points in the city and these are at present used by 270,631 persons annually, a fact which illustrates their value to the community; more establishments of this type are now being planned and will be built in conjunction with additional public washhouses, of which there is now only one.

The eagerness with which the housewife from the back-to-back house makes use of the public washhouse is readily understood when one appreciates the difficulties of conducting a weekly wash in the kitchen livingroom, the only source of hot water being the side boiler attached to the Yorkshire range and the kettle.

While 40 per cent of the houses lack a hot water supply, 60 per cent lack the facility of an inside water-closet. Most of the houses, in fact, built in Bradford prior to the first world war, are provided with a water-closet situated either in the open yard at the rear of the house or at the end of the block. The provision of an inside water-closet in existing back-to-back houses is just as difficult as finding space for a bathroom.

Another problem facing the department is the existence of approximately 4,200 waste water or "tippler" closets. There are closets standing in the yard at the rear of the premises which are flushed only during a period of rainfall or when slop water from the kitchen sink is being discharged. These are insanitary because they are not flushed with clean water immediately after use, from the top of the pedestal as in the case of a modern water-closet, the pedestal being consequently in a continuous state of foulness. While year by year some of these insanitary fitments are being converted, it is hoped in the near future to make a determined effort to eliminate them. The completeness of this programme will then leave the problem of the few remaining privy middens at outlying farms and cottages which are far removed from existing public sewers.

The provision of a piped water supply to outlying farms and cottages is a matter of some concern to the department and has been the subject of consideration during the past year. The existing water supplies from springs and wells have been on occasion found to be grossly polluted. Furthermore, in summer time many of these supplies are quite inadequate, particularly in the case of dairy farms. In co-operation with the Water Works Engineer a scheme has been evolved whereby the mains could be extended to within a short distance of the isolated farms.

Meteorology

Bradford, situated as it is in a bowl-shaped depression on the east side of the Pennines, has a climate typical of its position and altitude. The City extends to 25,000 acres, and varies in altitude from 1,200 ft. at Queensbury to 300 ft. at the City centre and 200 ft. at Esholt. The annual average of mean temperatures for the 30 year period ending 1935 was 47·5°F. compared with the 47·1°F. of Durham, 48·9°F. of Hull, 49·1°F. of Liverpool and 50·7°F. of London.

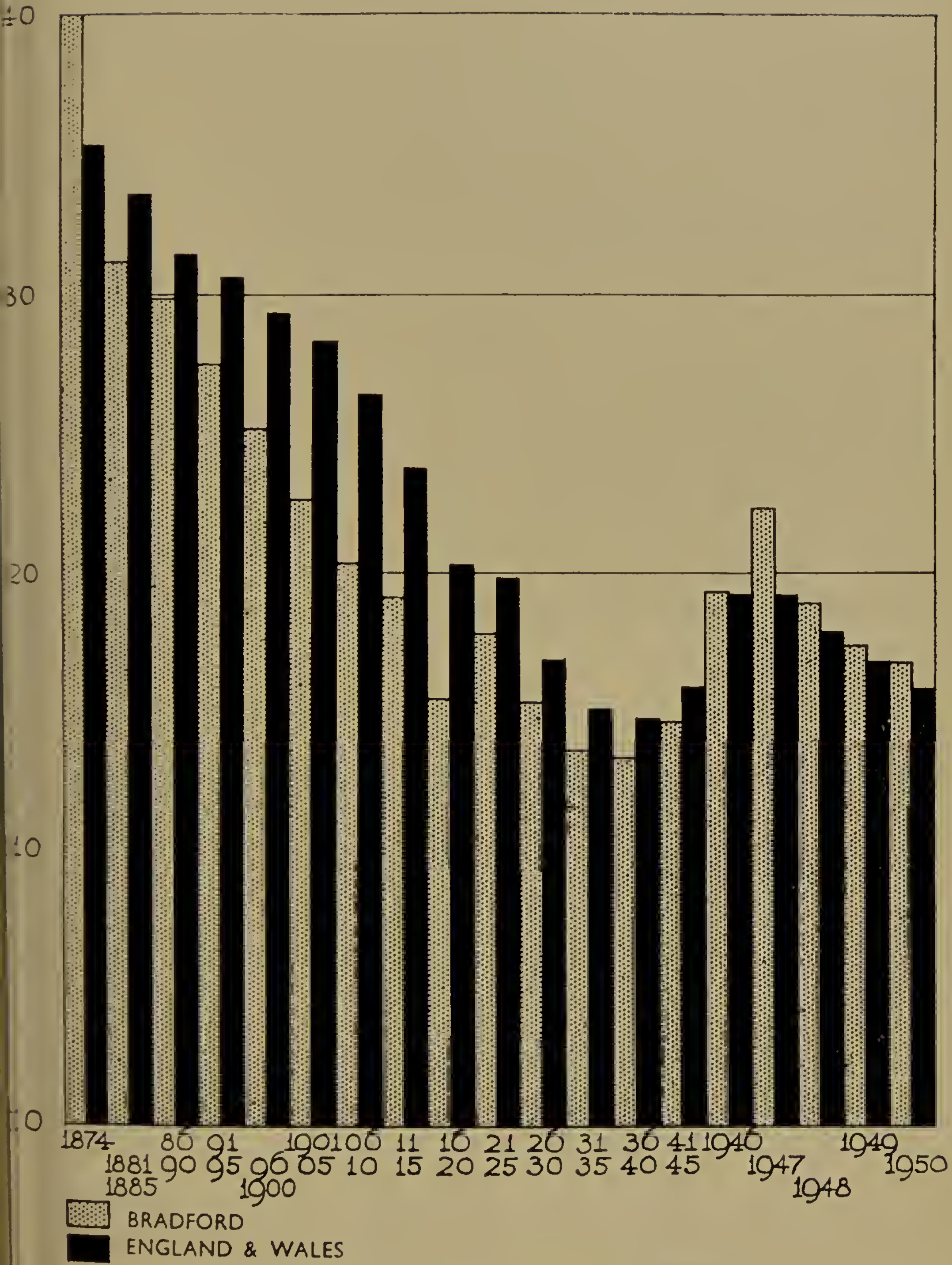
The average of the monthly mean temperatures for the year 1950 was 47·7°F. compared with 47·5°F. the average for the 30 years ending 1935, and with 49·6°F., the average of the monthly mean temperatures for 1949.

Rainfall amounted to 34·31 inches, compared with the average for the 40 year period ending 1948 of 34·04 inches, and with 31·11 inches for 1949.

The driest month was June (0·52 inches), and the wettest month was February (5·77 inches). It is noteworthy that in 1950 the second wettest month was August (5·06 inches). The heaviest daily rainfall was recorded on 23rd August, when 0·92 inches of rain fell.

There were 1,315 hours of bright sunshine, compared with the annual average for the 30 years ending 1935 of 1,215 hours, and with 1,527 hours for 1949.

THE BIRTH-RATE OF BRADFORD AND ENGLAND AND WALES, 1874–1950



(BIRTH-RATE PER THOUSAND POPULATION)

Fig. 5

The sunniest month was June, with 234·6 hours. January, the month with least sun, had only 10·6 hours. Maximum sunshine recorded on any day in the year was on 7th June, when 13·7 hours were observed.

During the year snow fell on 15 days, and lay on the ground for a total period of 30 days. Heaviest falls were in December (7 days), and during that month snow lay on the ground for 18 days.

Fog was observed on 23 days during the year, and November, with 6 days, was the worst month.

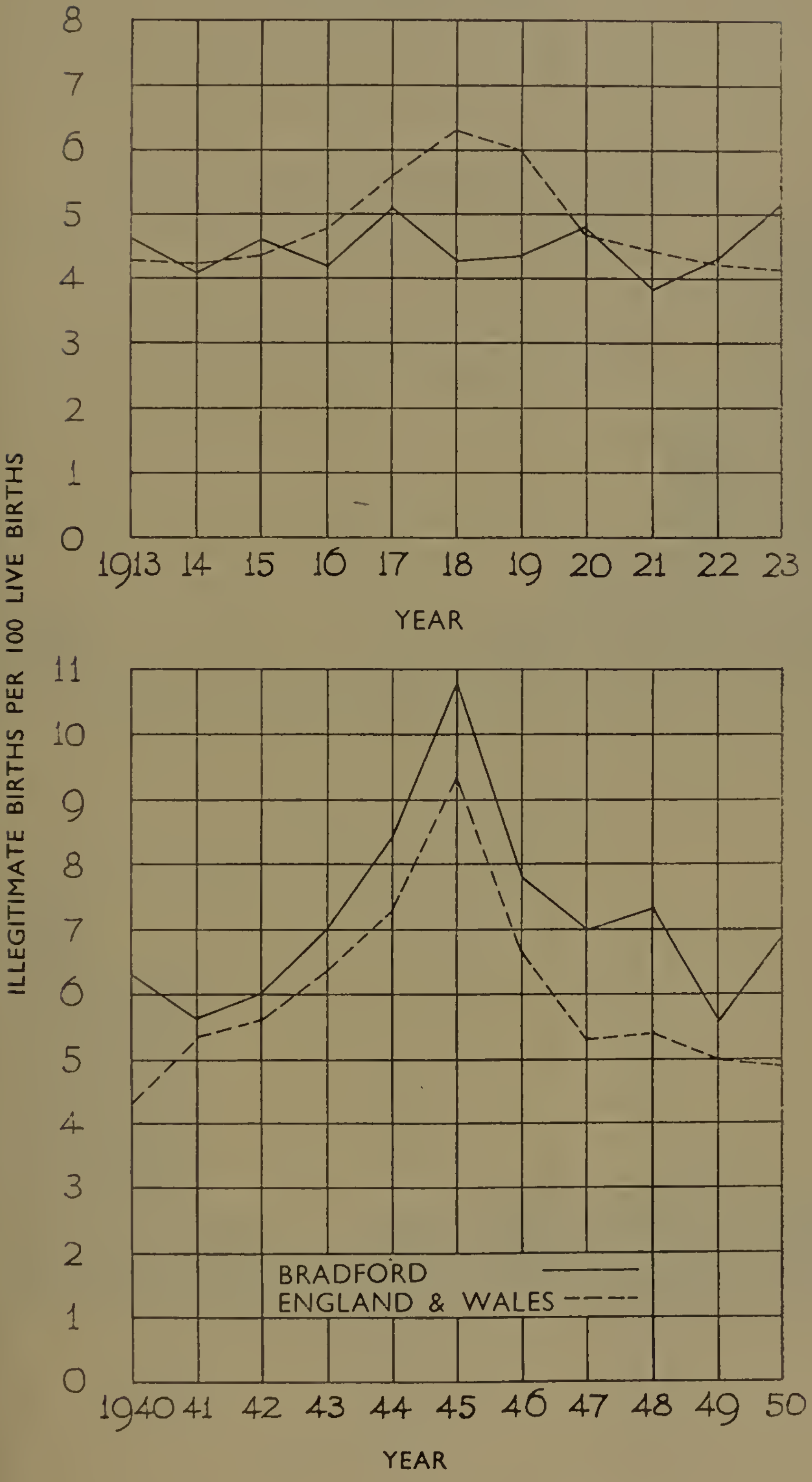
Births

Births registered during the year numbered 4,906, 2,523 males and 2,383 females. The birth rate of 16·7 per thousand of the population shows a decrease of 0·6 per thousand from 1949.

In Bradford the birth rate reached an average of 31 in 1881-5. Its downward movement since that time is shown in Table 3 and Fig. 5.

TABLE 3

Year	Bradford	England and Wales
1881–85	31·1	33·5
1886–90	29·8	31·4
1891–95	27·5	30·5
1896–1900	25·1	29·3
1901–05	22·6	28·2
1906–10	20·1	26·3
1911–15	19·0	23·6
1916–20	15·4	20·1
1921–25	17·9	19·9
1926–30	15·2	16·7
1931–35	13·5	15·0
1936–40	13·1	14·7
1941–45	14·5	15·9
1946	19·3	19·2
1947	22·2	19·1
1948	18·8	17·9
1949	17·3	16·7
1950	16·7	15·8



THE ILLEGITIMATE BIRTH RATE OF
BRADFORD AND ENGLAND AND WALES
1913–23 AND 1940–50

Fig. 6

Of the 4,906 births registered, 340 or 6·9 per cent were illegitimate; a rate of 1·3 per cent greater than in 1949. Thus, roughly, one in every fourteen children is born out of wedlock. This rate has ranged from a minimum of 4·3 per cent in 1906 to a maximum of 10·8 per cent in 1945. Its movement during the two wars is shown in Table 4 and Fig. 6.

TABLE 4 *Illegitimate Births per* 100 *Total Live Births*

Year	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924
Bradford ..	4·1	4·6	4·2	5·1	4·3	4·4	4·8	3·8	4·3	5·2	5·7
England and Wales ..	4·2	4·4	4·8	5·6	6·3	6·0	4·7	4·4	4·2	4·4	4·2

Year	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Bradford ..	6·3	5·7	6·0	7·0	8·4	10·8	7·8	7·0	7·3	5·6	6·9
England and Wales ..	4·3	5·4	5·6	6·4	7·3	9·3	6·7	5·3	5·4	5·0	4·9

Marriages

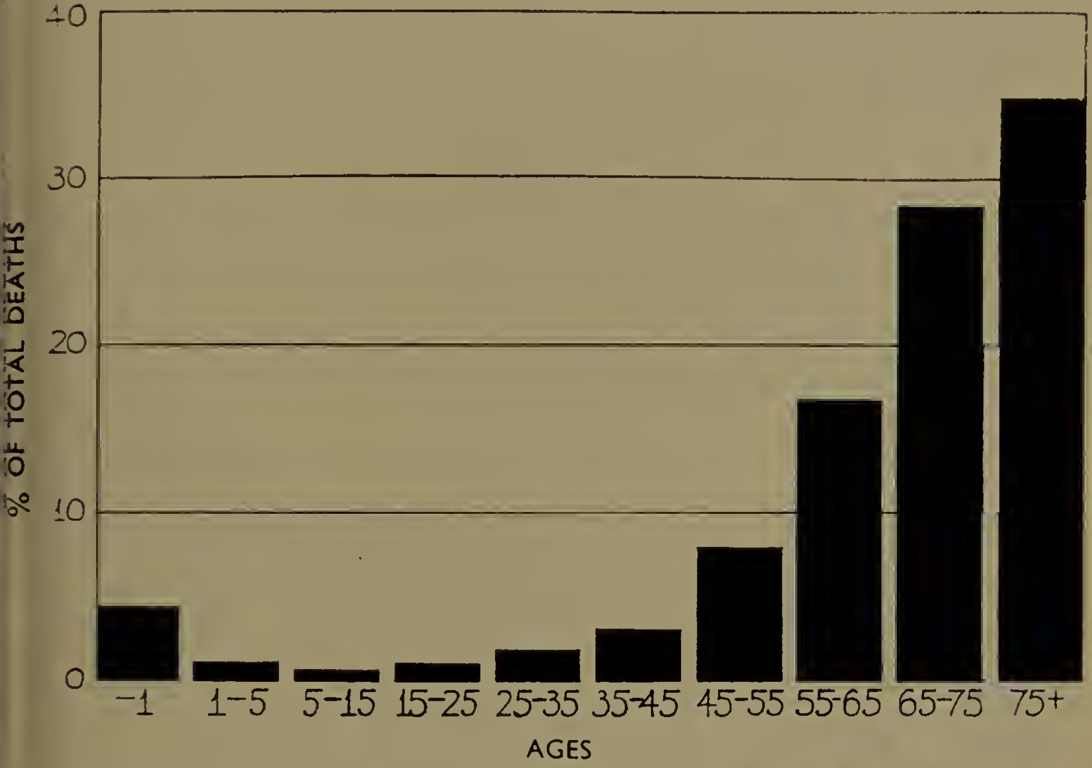
The marriage rate for 1950 was 17·0 per 1,000 of the population as compared with 17·2 for 1949 (England and Wales 1900—16·3). The fluctuations in the marriage rate for England and Wales is shown in Table 5.

TABLE 5

Year		Persons married per 1,000 of population—all ages England Wales		Decree *nisi* made absolute during 1947 and previous years
1936	..	17·4		4,057
1937	..	17·5		4,888
1938	..	17·6		6,250
1939	..	21·2		7.955
1940	..	22·5		7,755
1941	..	18·6		6,383
1942	..	17·7		7,645
1943	..	14·0		9,999
1944	..	14·3		12,312
1945	..	18·7		15,634
1946	..	18·0	Bradford	30,298
1947	..	18·6	21·9	60,190
1948	..	18·2	20·7	43,698
1949	..	17·0	17·2	34,896
1950	..	16·3	17·0	—

DEATHS BY SEPARATE AGE GROUPS—BRADFORD, 1950

TOTAL DEATHS 4173



DEATHS BY SEPARATE AGE GROUPS—BRADFORD, 1880
TOTAL DEATHS 4107

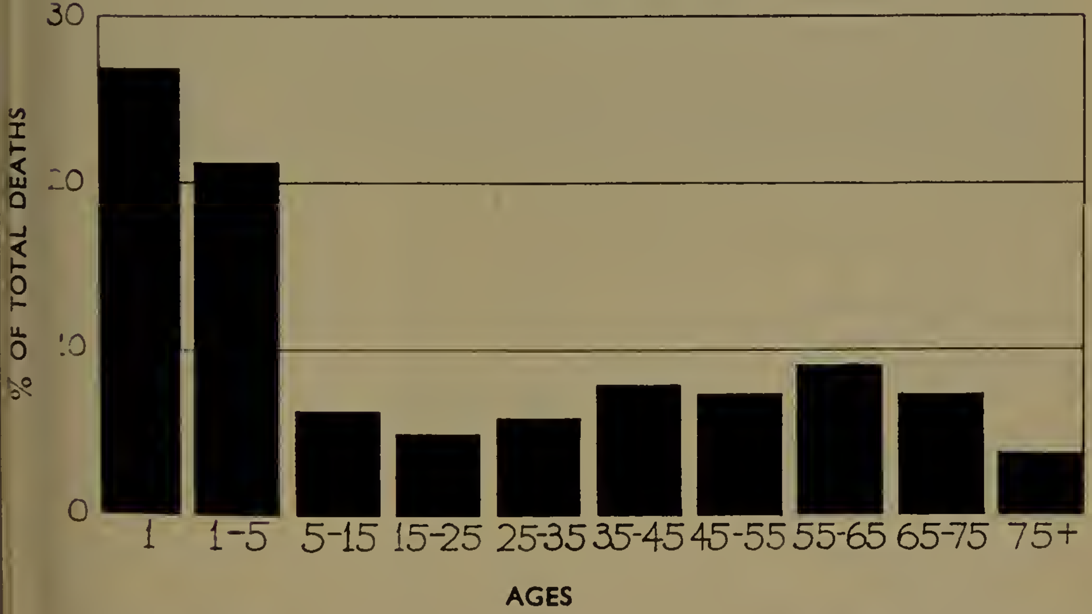


Fig. 7

Table 5 also shows the extraordinary increase which has taken place in the number of dissolutions and annulments of marriage. Whereas in 1876 there was one marriage dissolved for every 693 marriages contracted, in 1949 there was one marriage dissolved for every 10 marriages contracted.

Deaths

There were 4,173 deaths during the year, giving a crude mortality rate of 14·2 per 1,000 population. Adjustment of this figure by the area comparability factor which makes allowance for the differing age and sex distribution of the population in different areas, gives a rate of 13·9 per 1,000 of the population. This compares with death rates of Croydon 10·1, Bristol 11·25, Portsmouth 11·47, Southampton 11·72, Leicester 11·73, Coventry 11·9, Nottingham 12·01, Birmingham 12·3, Sheffield 12·3, Cardiff 12·4, Plymouth 12·54, Kingston-upon-Hull 13·2, Leeds 13·3, Stoke-upon-Trent 13·9, Liverpool 11·39 Manchester 14·3, Sunderland 14·36, Newcastle-upon-Tyne 14·64, Salford 14·8; the death rate for England and Wales was 11·6.

Table 6 and Fig. 7 show the distribution of deaths by separate age groups.

Figure 8 is again included to show the very different picture in 1883 when 75 per cent of deaths were of persons under the age of 55.

Table 6

Age	1946	1947	1948	1949	1950
Under 1 year	265	380	235	191	185
1–2 years	17	13	13	14	20
2–5 ,, ...	13	20	25	26	26
5–15 ,, ...	30	27	22	24	25
15–25 ,, ...	46	57	57	40	42
25–35 ,, ...	86	73	77	76	74
35–45 ,, ...	148	153	132	119	131
45–55 ,, ...	316	339	318	334	334
55–65 ,, ...	712	665	659	658	697
65–75 ,, ...	1,177	1,146	1,135	1,272	1,181
Over 75 years	1,230	1,326	1,198	1,469	1,458

THE CRUDE DEATH RATE OF BRADFORD AND ENGLAND AND WALES, 1886–1950

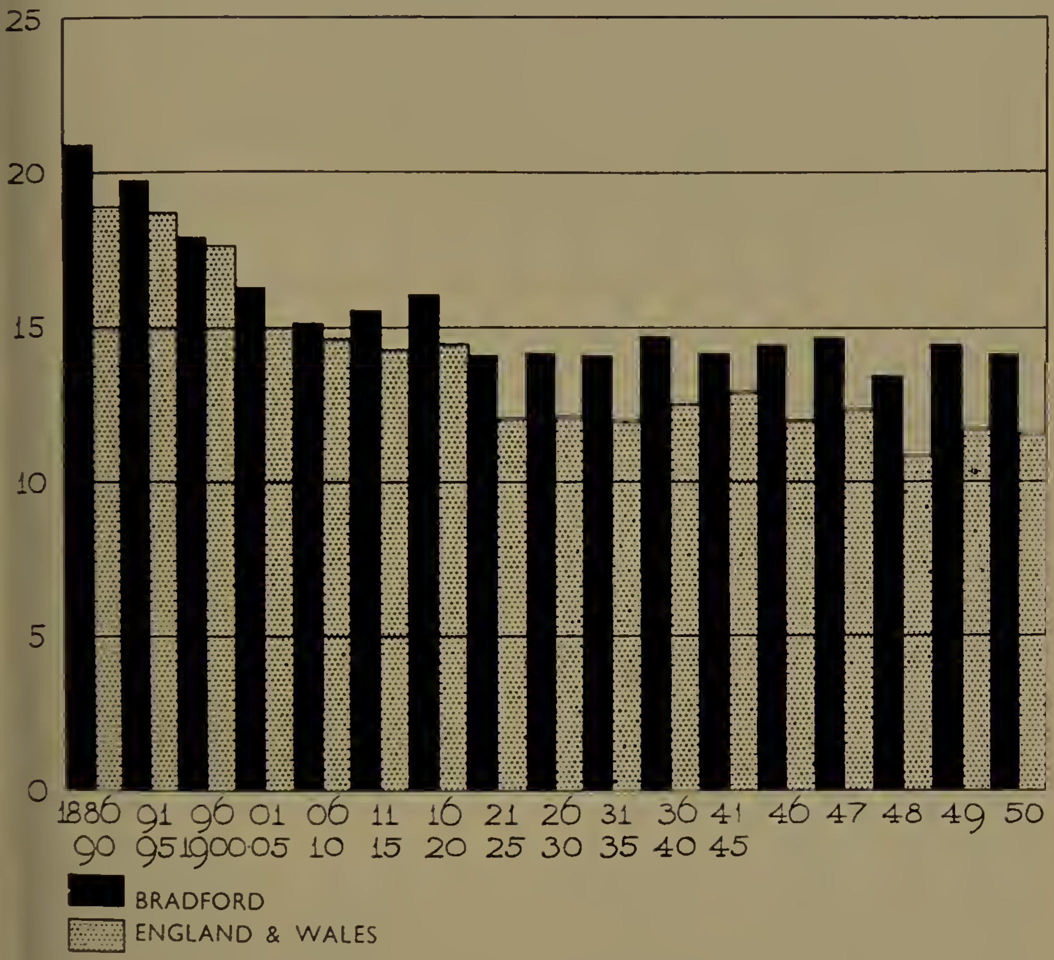


Fig. 3

*The death rates of the present day are about half those of a century ago. The improvement has been greater for females than males. It has been greatest for children of school age; children under 5 years old come next, followed by young adults. From age 35 the improvement has diminished with advancing age, so that after age 75 it is very slight. In 1948 only 7 in every 100 deaths were of children under 5, against 40 in every 100 a century ago. On the other hand, the deaths of persons over 65 years of age and over had in the same period increased from 18 to 60 in every 100 deaths. The improvement in chances of survival may also be seen by reference to the increases in the expectation of life over a period of years. For example, boys born in 1841 could, on average, expect to survive to the age of 40, and girls to 42; by 1901 these average expectations had increased to 48 and 52, by 1931 to 59 and 63, and by 1948 to 66 and 71.

* Matters of Life and Death—Registrar General.

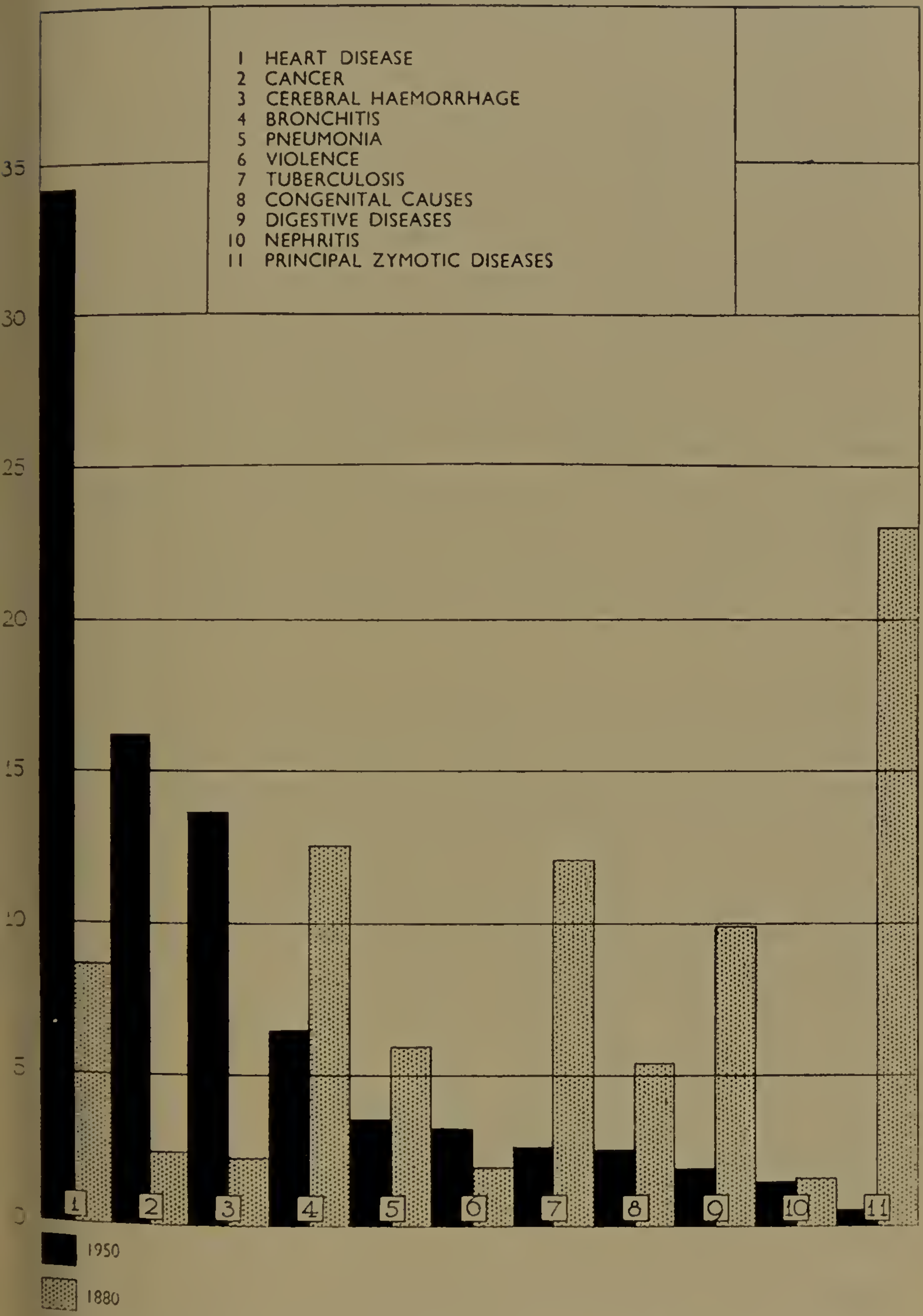
Comparative Mortality from Various Diseases

Table 7 and Fig. 9 shows the relative frequency of deaths due t certain diseases in Bradford in 1950. Heart disease was responsible fo 34·1 per cent of the total deaths, followed by cancer, 16·1; cerebra haemorrhage, 13·65; bronchitis, 6·39; pneumonia, 3·49; violence 3·13 and tuberculosis, 2·61. Fig. 10 also shows the relative frequency o the same causes of death in 1889.

The histograms demonstrate in the most striking fashion the diminution that has taken place in the number of deaths due to the epidemi diseases such as the enteric fevers, diarhoea and enteritis, scarlet feve diphtheria, measles and smallpox. Whereas in 1889 13 per cent of a deaths were due to these causes, to-day they are responsible for onl 1 per cent. Similarly, sixty years ago, tuberculosis took its toll to th extent of 10 per cent of all deaths. In 1950 2·3 per cent were due t this disease. Deaths due to bronchitis and pneumonia in 1950 are les than half the number recorded in 1889.

On the other hand, deaths due to the degenerative diseases of ol age are on the increase and now top the list—heart disease, cance cerebral haemorrhage and thrombosis accounted for 66·81 per cent all deaths in 1950.

RELATIVE FREQUENCY OF CAUSE OF DEATH
BRADFORD, 1950 AND 1880



(NUMBERS EXPRESSED AS A PERCENTAGE OF THE TOTAL DEATHS)

Fig. 9

Comparative Mortality Index

*When considering changes in the death rate from a disease which tends to kill people in early life, like measles, or in late life like apoplexy, we must take into account the changes in the proportion of children and old people in the whole population. A disease such as cancer is bound to produce more deaths during a year in a population consisting largely of old people than in another population of the same size consisting mostly of school children, and so a simple or crude death rate does not tell the real story. To overcome this difficulty the General Register Office uses a figure called the comparative mortality index, obtained by finding the rates at which people died of the disease at successive ages in each year, and calculating the numbers who would have died at all ages combined, if the population had maintained a steady sex-age composition. This provides a true comparison between the rates of dying from the disease in any two years. Tuberculosis mortality measured in this way was five times as great in 1861-65 as it was in 1941-45.

* Matters of Life and Death—Registrar General.

Heart Disease

The death rates for heart disease, as a whole, have been increasing steadily during the last twenty years. While much of this increase may be due to changes in certification and rules of classification, it cannot all be explained in this way. Deaths from coronary disease and angina pectoris are four times greater than they were in 1889. The comparativ mortality index for these diseases increased for males from 0·62 in 193 (England and Wales) to unity in 1938; and for females it increase from 0·56 to unity. In 1941 the indices were 1·10 and 1·08 respectively and by 1945 they had reached 1·44 and 1·38. The upward trend ther became still more pronounced, the comparative mortality index i 1947 being 1·851 for males and 1·765 for females. The percentag increases in death rates between 1945 and 1947 at different ages ove 35 were as follows:

	35–	45–	50–	55–	60–	65–	70–	75 and over
Males.. ..	+29	+34	+32	+23	+24	+28	+31	+34
Females ..	+48	+17	+4	+22	+19	+19	+25	+41

The deaths from coronary disease and angina pectoris in Bradford during 1950 numbered 528.

TABLE 7 *Bradford* 1950—*Relative Frequency of Causes of Death*

Causes of Death	Number	Percentage of Total
Heart Disease	1,423	34·1
Cancer	663	16·1
Cerebral Haemorrhage	570	13·6
Bronchitis	267	6·4
Pneumonia	146	3·5
Violence	134	3·2
Tuberculosis	109	2·6
Congenital causes	106	2·5
Digestive diseases	76	1·8
Nephritis	58	1·4
Principal Zymotic diseases	21	·5

(See Fig. 8—Relative Frequency of Causes of Death).

Cancer and other Malignant Tumours

There were 663 deaths from this disease, a crude death rate of 2,252 per 1,000,000, which is little at variance with the rates for the past seven years.

TABLE 8 *Deaths from Cancer—Bradford Crude Death Rates: Bradford, England and Wales*

	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Bradford												
Deaths	514	540	564	594	612	608	562	646	609	647	580	663
Crude Death rate per 1,000,000	1,810	1,990	2,090	2,240	2,310	2,130	2,130	2,310	2,130	2,242	1,950	2,352
England and Wales												
Crude Death Rate per 1,000,000	1,685	1,780	1,837	1,891	1,957	1,953	1,990	1,911	1,907	2,011	1,919	—

Crude death rates from cancer at all ages (England and Wales) continued to rise for each sex, the increase amounting to nearly 2 per cent annually for males and 1 per cent for females; but correction for effects of the progressive change in the age structure of the population modifies the trend considerably. The civilian comparative mortality indices with 1938 as unit base were as follows:

	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
Males ..	1·000	0·983	1·010	1·013	1·012	1·022	1·006	1·024	1·018	1·047
Females ..	1·000	0·984	0·985	0·969	0·964	0·961	0·941	0·937	0·949	0·949
Persons ..	1·000	0·985	1·002	0·994	0·992	0·994	0·975	0·982	0·986	0·998

In 1946 and 1947 the index for females was 5 per cent below 1938 level, whereas the male index average about 3 per cent above. Taking both sexes together, the index reached the highest quinquennial value of 0·999 in 1931-35, and remained at 0·998 in 1936-40. During 1941-43 the comparative mortality index averaged 0·993, and for 1944-46 it fell to 0·981, but in 1947 it was again 0·998. In 1948 and 1949 it was 0·999.

If bronchogenic cancer is excluded there has been a progressive decline in cancer mortality (aggregate of all sites) both of men and women at all age groups between 35 and 65 since before 1930, and at ages 65–74 since before 1935.

Unfortunately, in cancer of the lung and bronchus, a very different story is to be told. The increase in death rate (England and Wales) from this cause continues to be unparalleled among all the causes of death. Comparing the rates in 1947 with the mean annual rate in 1921-30, men between 45-70 show a tenfold increase, whilst a three-, four or fivefold increase has occurred amongst women of various ages. No sign of diminution in the annual increments of mortality appeared in 1949 or 1950. The deaths in Bradford increased from 18 in 1932 to 36 in 1936, 42 in 1940, 82 in 1949, and 94 in 1950.

There is so far no satisfactory explanation of this increase, although an observation of Dr. Percy Stocks noted in last year's report is worthy of note. He demonstrated a significant negative correlation between the death rates of lung cancer and bronchitis in certain towns and the annual record of bright sunshine in the same areas. Towns with high mortality rates from lung cancer and bronchitis had low rates of annua sunshine. He suggests that the only explanation of these observations are that either smokiness of atmosphere is an important factor in itsel producing cancer of the lung, or sunshine is an important factor in preventing its incidence. Recently evidence has been forthcoming which strongly suggests a relationship between cigarette smoking and cancer of the lung.

Intra-cranial Vascular Lesions

This heading includes deaths from cerebral hæmorrhage (apoplexy), cerebral embolism and thrombosis. There were in all, 570 deaths (236 males and 334 females).

TABLE 9 *Deaths from Cerebral Hæmorrhage, etc.,* 1941–1950: *Bradford*

	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Males . .	201	190	177	201	190	188	179	196	240	236
Females	287	244	215	279	292	267	271	221	287	334
Persons	488	434	392	479	482	455	450	417	527	570

There has been no significant alteration in the death rates from intra-cranial vascular disease.

Pneumonia and Bronchitis

TABLE 10 *Deaths from Bronchitis, Pneumonia,* 1940–1949: *Bradford*

Bronchitis	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Males . .	174	168	168	142	153	153	199	142	167	177
Females . .	149	96	130	90	112	84	115	99	96	90
Persons . .	323	264	298	232	265	237	314	241	263	267
Pneumonia										
Males	95	104	112	114	102	97	109	93	100	70
Females . .	57	71	93	67	73	75	74	80	104	76
Persons . .	152	175	205	181	175	172	183	173	204	146

The bronchitis figures for England and Wales show very little variation for males between 1940 and 1950. There has been, however, a slight but steady decrease in the deaths from this disease amongst females over the same period. Deaths from pneumonia for both sexes, on the other hand, have decreased steadily during the same period. It would seem that the experience of England and Wales is reflected in the Bradford figures for these diseases of the respiratory system.

Violence

Deaths from violence numbered 134; suicide accounting for 34, road accidents for 21, other accidents 69.

Tuberculosis

There were 92 deaths from respiratory tuberculosis; a crude death rate of 0·31, and 17 deaths from other forms of tuberculosis, giving a crude death rate of 0·06.

The crude death rate from all forms of tuberculosis was 0·37.

TABLE 11 *Deaths from Tuberculosis, All Forms: Bradford* *Mortality Rates per* 1,000,000 *o the Population: Bradford, England and Wales*

Year ..	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Deaths, Bradford..	166	178	178	151	167	142	149	150	148	141	141	10
Bradford Rate ..	596	655	661	570	642	542	525	538	512	489	484	37
England and Wales Rate	636	699	730	657	658	628	615	551	552	507	458	36

TABLE 12 *Deaths from Pulmonary Tuberculosis: Bradford* *Mortality Rates per* 1,000,000: *Bradford England and Wales*

Year ..	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	195
Deaths, Bradford..	142	149	147	116	130	115	105	130	121	121	119	9
Bradford Rate ..	499	548	546	438	499	439	377	466	420	419	408	31
England and Wales Rate	538	588	602	542	557	524	515	468	473	440	403	–

During the past thirty years there has been a great reduction in th death rate from all forms of tuberculosis. The death rate has, in fact been halved in the twenty-five years since 1923.

Notifications of respiratory tuberculosis during 1950 numbered 24 a notification rate of 84·6 per 100,000 population, and a reduction over 10 per cent on the previous year when there were 276 notification with a notification rate of 94·7 per 100,000 population.

The rates of deaths from respiratory tuberculosis to notification was 37 per cent. The age incidence of the notifications is given i Table IV of the Appendix. The most notable features of the Table ar the much lower attack rate for females, 99 cases, as compared wit 150 males, and the preponderance of female cases (77 per cent) in th 15–44 age group.

INFANTILE MORTALITY RATES—BRADFORD AND ENGLAND AND WALES

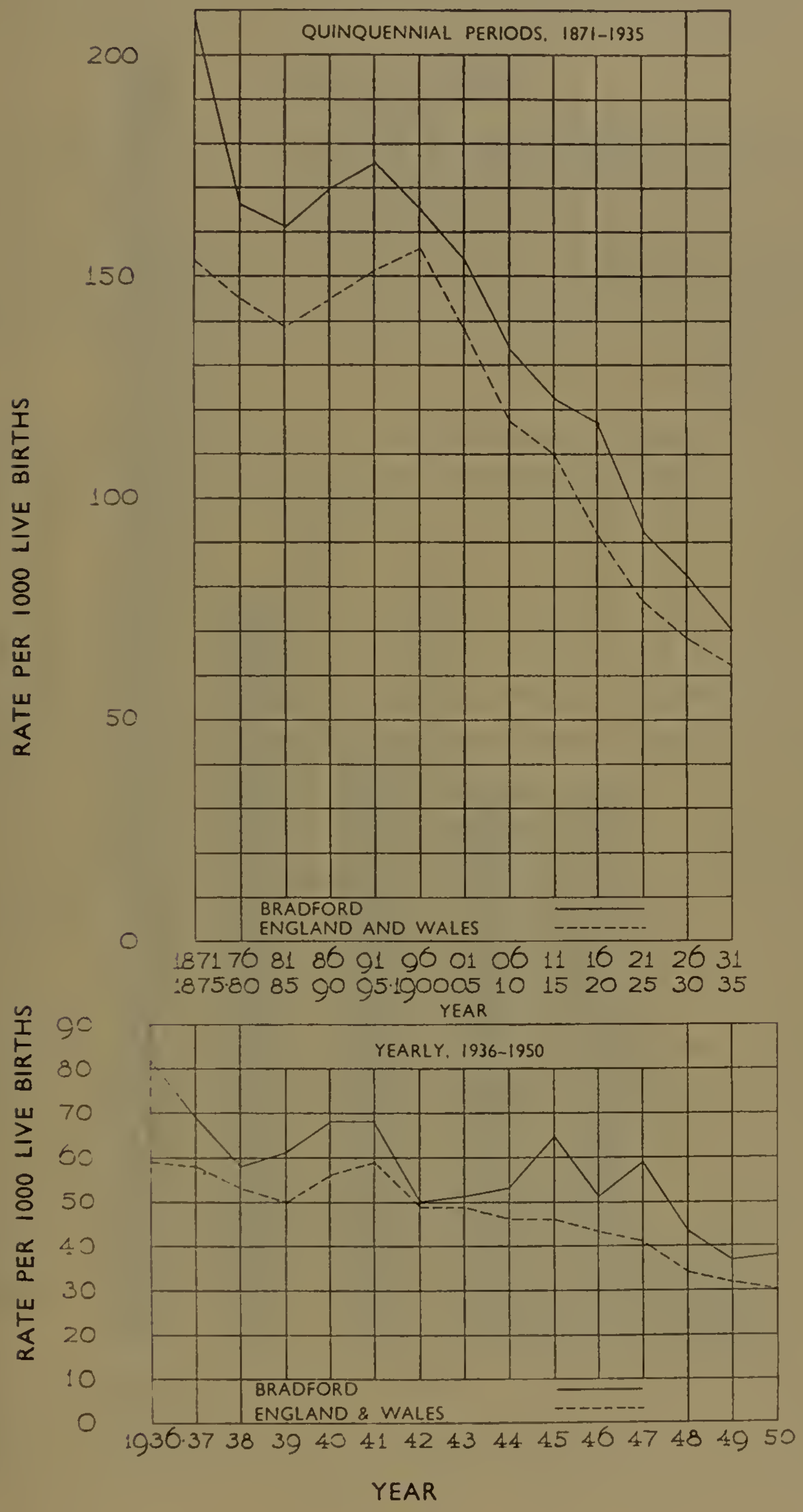


Fig. 13

The experience of the country as a whole with respect to males over 45 is reflected in the Bradford figures. Quite a substantial proportion of the notifications, almost one third, in fact, are in the age group 45–64.

Infantile Mortality

In Bradford in 1950 there were 185 deaths of children under one year of age. This corresponds to an infantile mortality rate of 38, which is the lowest ever recorded. It is five times less than that for the year 1875 (202). It is higher, however, than that for England and Wales (30) and the average for 126 county boroughs and great towns (including London) (34).

TABLE 13 *Infantile Mortality Rate: Bradford, England and Wales*

Year ..	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Bradford ..	62	69	70	52	51	54	65	51	60	43	37	38
England and Wales	51	57	60	51	49	45	46	43	41	34	32	30

Fig. 13 shows how the rates for both Bradford and England and Wales have diminished during the war years and after. The Bradford rate, which has for many years been, on the average, 6 to 9 per thousand higher than the rate for England and Wales, has not shown the same steady decrease evidenced by the England and Wales figures. In 1945 and 1947 there were sharp rises from 53 in 1944 to 65 in 1945, and from 49 in 1946 to 60 in 1947. An increased incidence of diarrhœa and enteritis during these years was responsible.

Infantile mortality rates for the 20 large towns of England and Wales are as follows: Bristol 23·2; Croydon 26; Cardiff 27; Sheffield 27·8; Plymouth 29·43; Southampton 29·48; Portsmouth 29·84; Leicester 29·5; Birmingham 30·2; Leeds 31·0; Nottingham 31 Coventry 32·6; Newcastle-upon-Tyne 33·365; Kingston-upon-Hull; 34·3; Liverpool 37·3; Manchester 38·87; Bradford 37·7; Salford 43; Stoke-on-Trent 43; Sunderland 45.

Bradford takes sixteenth place in the above list of 20 county boroughs. If the infant deaths are further analysed according to whether they occurred before or after the end of the fourth week, then

INFANTILE MORTALITY RATE FOR SPECIFIC CAUSES OF DEATH—BRADFORD, 1949 AND 1950

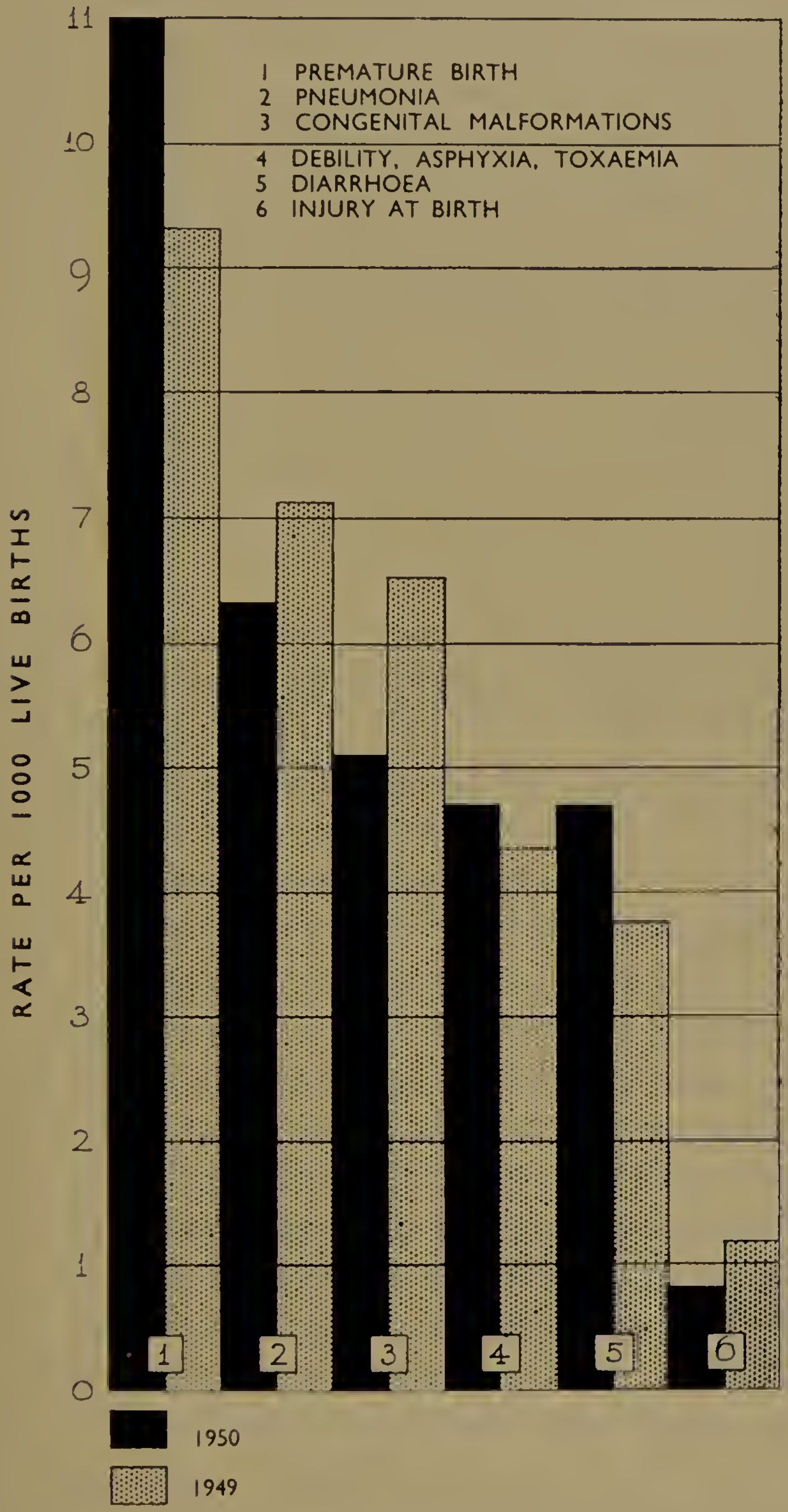


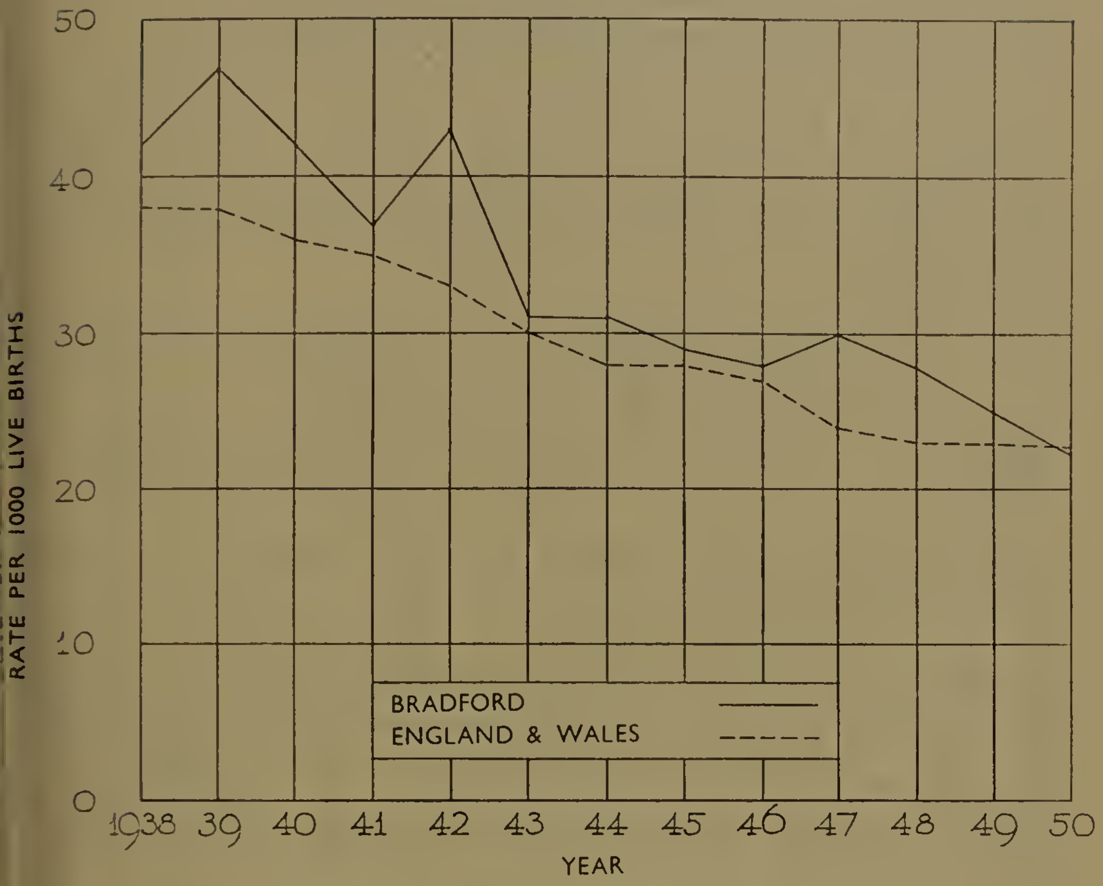
Fig. 10

the rate of deaths occurring during the first four weeks after birth—the neo-natal mortality rate—was, in Bradford, 19·6, which gives Bradford twelfth place equal amongst the 20 county boroughs, the neo-natal mortality rates of which, varied from 15·78 to 25. A comparison of still-birth rates for the same towns placed Bradford in the seventh position, with a still-birth rate of 22·3, in a range varying from 18·88 to 31·0. Still-births and neo-natal deaths have much in common, both depending largely on factors that operate before and during birth. Combining still-birth rates and neo-natal death rates of the 20 towns, Bradford takes twelfth place in a range varying from 36·4 to 54·0.

Finally, comparison of the post-natal rates reveals, as could be surmised after perusal of the above, Bradford in the low position of eighteenth in the scale, with a post-natal mortality rate of 18·1 in a range varying from 5·83 to 22.

To sum up, the Bradford neo-natal and still-birth rates for 1950 can be considered reasonably good, but the post-natal rate unsatisfactory. There were 90 deaths in the post-natal periods of which 60 (70 per cent) were due to infection of one kind or another. For example, there were 21 deaths due to enteritis, 36 to pneumonia and bronchitis and 8 due to whooping cough. The post-natal period is one in which the child comes under the influence of external circumstances in which he is frequently exposed to infection and whilst the improved control of the common infectious diseases has been reflected in the improvement over the years in the post-natal mortality rates, there still remains much to be done to protect infants from the results of infection by organisms responsible for pneumonia, bronchitis, enteritis and the like. The harsh climatic conditions of this part of the country undoubtedly play a part in lowering the resistance to infection and the insanitary and overcrowded housing circumstances of so many of the families contributes to the spread of infection. Ignorance of the simple and common rules of personal hygiene, it is feared, is also an important factor. Is the health visitor, with her greatly increased duties under the National Health Service Act, devoting as much time as she should to the mother

STILL-BIRTH RATES—BRADFORD AND ENGLAND AND WALES, 1938–1950



NEO-NATAL AND POST-NATAL MORTALITY RATES—BRADFORD, 1938–1950

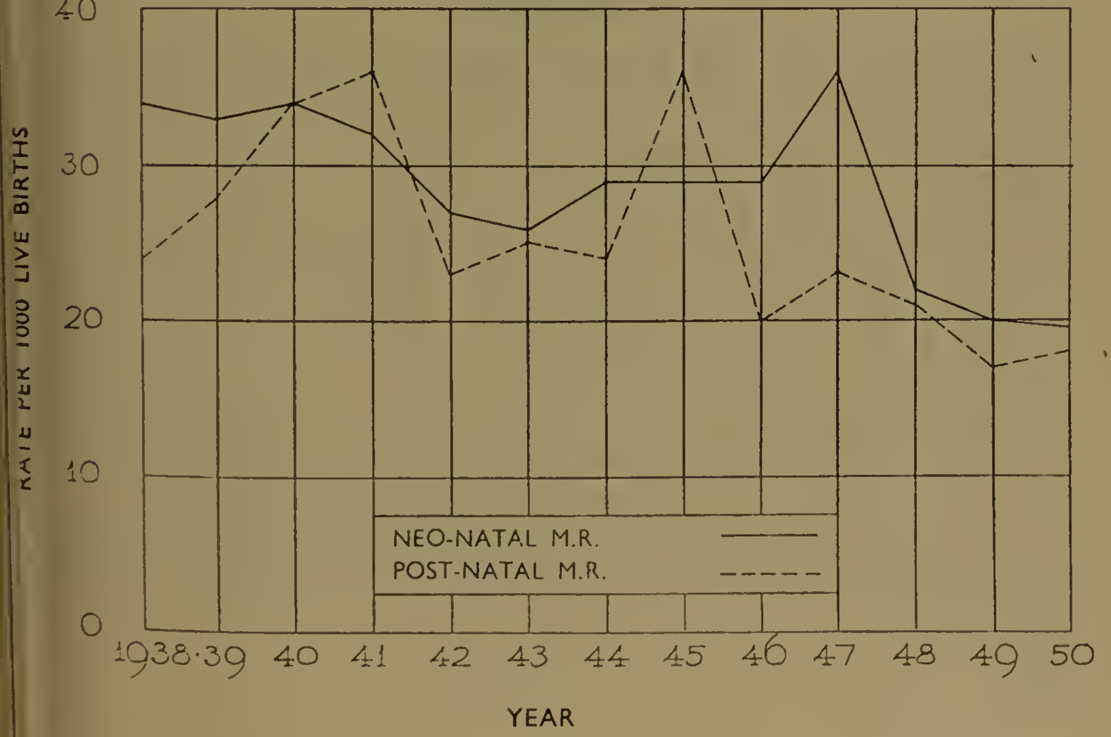


Fig. 11

and young child who still are her prime responsibility? The number of health visitors according to the accepted standards, required in Bradford, is 50, the number actually employed during 1950 was 20.

Because of the shortage of qualified Health Visitors, a priority system of visiting had to be arranged. First on the list was the unmarried mother and her child. The good results of this policy are shown in the following Table:

Table 14 *Infantile Mortality Rates per* 1,000 *Live Births* *Illegitimate and Legitimate Infants*

Year	1942	1943	1944	1945	1946	1947	1948	1949	1950
Illegitimate ..	69	76	67	80	70	63	43	44	35
Legitimate ..	50	47	52	63	47	59	43	37	38

Fig. 10 compares the relative incidence of infant deaths due to certain causes for the years 1949 and 1950.

It will be noted that in 1950 the infantile mortality rate amongst illegitimately born infants was less than that amongst the legitimately born. The same standard of care extended to the supposedly more fortunate section of the infant population might provide striking results.

Still-births

The still-birth rate has declined even more rapidly than the neo-natal mortality rate from 48 in 1938 to 22 in 1950, and this striking improvement in the two rates is indicative amongst other thangs, of a higher standard of obstetric care. Other factors have undoubtedly played a part. The nation is enjoying a period of full employment—more money is entering the home. An enlightened food policy is in force, which many regard as the principal factor in the improvement. It would seem that the general health of the mothers has been raised and that in this way they are better able to produce stronger and healthier children.

There were 112 still-births; a rate of 22·3 per thousand total births, which is slightly lower than for England and Wales (22·7), a notable achievement.

STILL-BIRTH RATES—BRADFORD, 1938–1950

1. RATE PER THOUSAND ILLEGITIMATE BIRTHS
2. RATE PER THOUSAND TOTAL BIRTHS

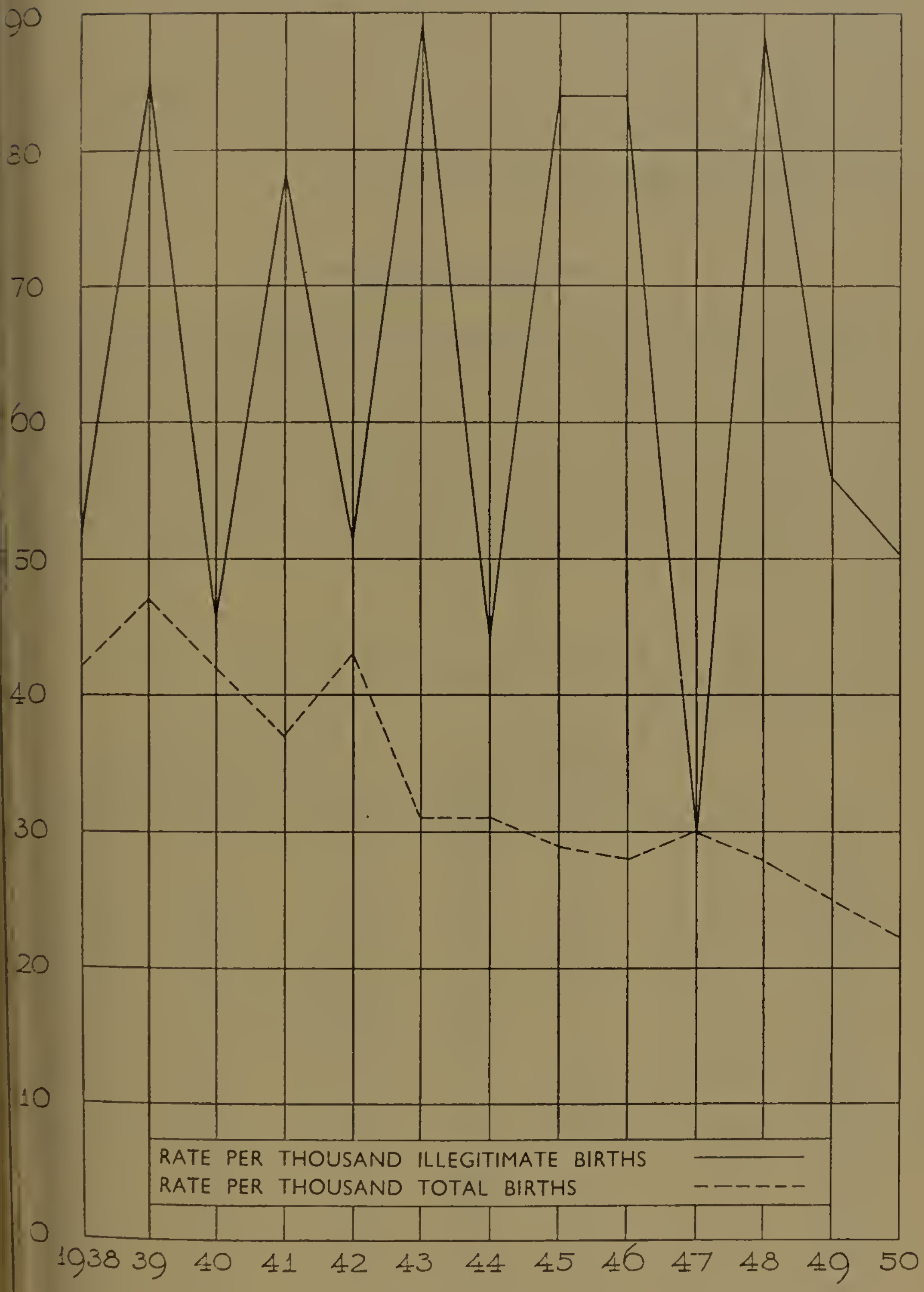


Fig. 15

Fig. 11 demonstrates the pronounced improvement which has taken place since 1938. As might be expected, illegitimate children are more frequently still-born than the legitimate. Fig. 15 shows that while there has been a steady decrease in the still-birth rate per 1,000 total births (legitimate and illegitimate) the same decrease was not in evidence in respect of the illegitimate still-birth rate. In 1947, however, there was a big drop from 84 to 30 and in 1949 the rate was 25; very little different from the rate amongst the legitimately born.

Maternal Mortality

Table 15 illustrates the gratifying diminution that has taken place in the number of deaths due to childbirth. During the ten year period prior to 1936 the rate varied between 7 and 4 deaths per 1,000 total births; thereafter the rate slowly declined until 1946 when there was a sharp drop to 1·46. It fell still lower in 1947 to 1·07 and in 1948 to 0·88. In 1949 the rate increased to 1·35 per 1,000 total births, and in 1950 it was 1·40.

TABLE 15 *Maternal Mortality Rates in Previous Years*

	BRADFORD			ENGLAND AND WALES		
Year	Puerperal Sepsis	Other Puerperal Causes	Total Puerperal Mortality	Puerperal Sepsis	Other Puerperal Causes	Total Puerperal Mortality
1936 ..	1·47	3·17	4·64	1·34	2·31	3·65
1937 ..	0·95	1·67	2·62	0·97	2·26	3·23
1938 ..	0·49	3·66	4·15	0·89	2·19	3·08
1939 ..	1·32	1·85	3·17	0·74	2·82	3·56
1940 ..	1·05	1·83	2·85	0·52	1·64	2·16
1941 ..	1·63	1·36	2·99	0·48	1·75	2·23
1942 ..	1·20	1·20	2·40	0·42	1·59	2·01
1943 ..	0·70	2·08	2·78	0·73	1·56	2·29
1944 ..	0·83	1·67	2·50	0·59	1·34	2·93
1945 ..	0·70	2·57	3·27	0·49	1·30	1·79
1946 ..	0·35	1·11	1·46	0·18	1·24	1·42
1947 ..	0·31	0·78	1·07	0·26	0·91	1·17
1948 ..	0·00	0·88	0·88	0·24	0·78	1·02
1949 ..	0·19	1·15	1·35	0·22	0·76	0·98
1950 ..	0·40	1·00	1·40	0·12	0·74	0·86

MATERNAL MORTALITY RATE—BRADFORD AND ENGLAND AND WALES, 1926–1950

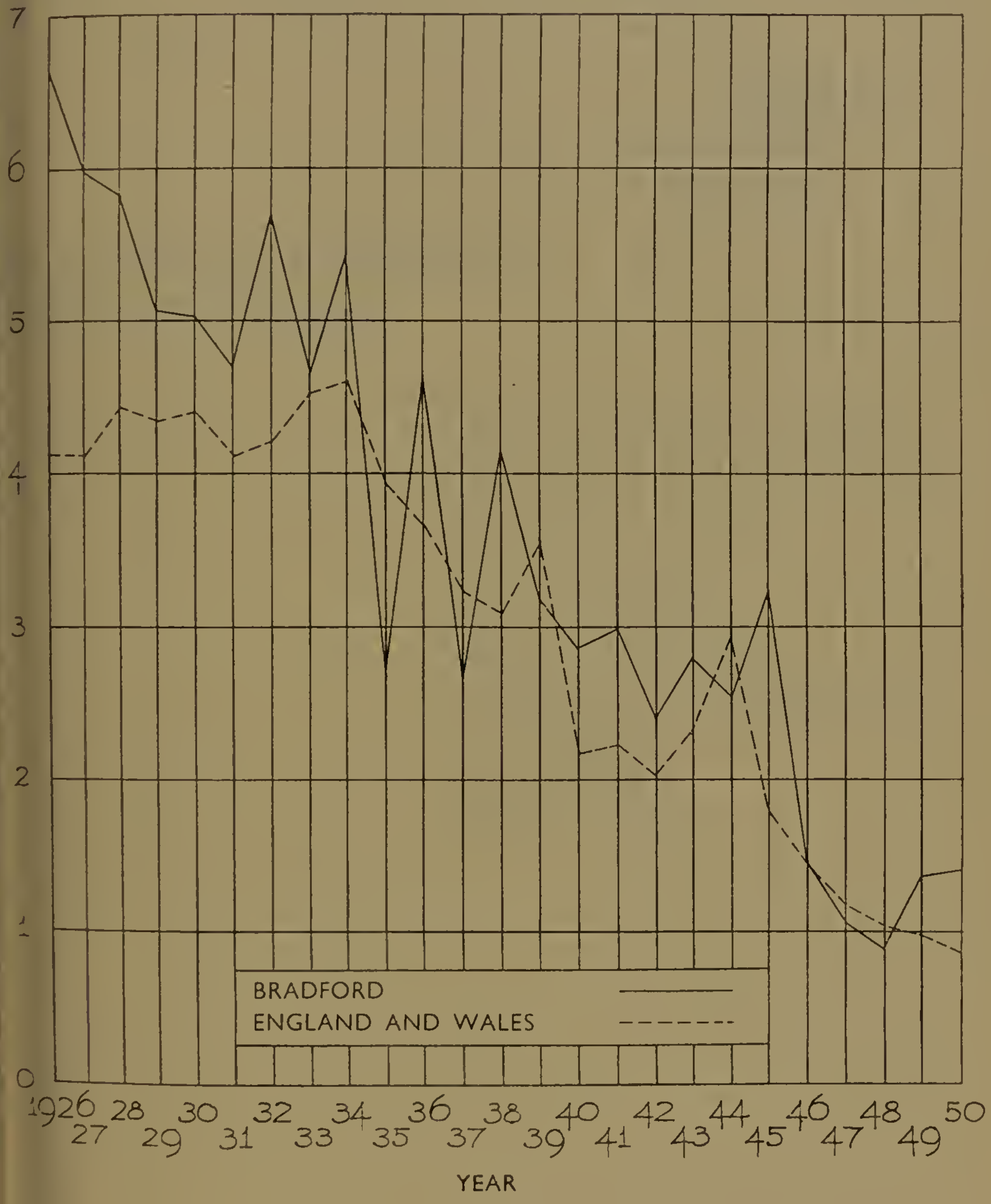


Fig. 16

These deaths are classified in the following table, according to the age period of the mother, and the condition from which the deaths arose.

TABLE 16 *Deaths in Childbirth* *Age and Classified Cause*

Classified Cause	Age in Years						
	20	25	30	35	40	45	Total
Toxæmias	–	1	1	1	–	–	3
Septic Conditions ..	–	1	–	–	–	–	1
Ectopic Gestation ..	–	–	–	–	–	–	–
Hæmorrhage	–	–	1	–	–	–	1
Other Causes	–	1	–	1	–	–	2
Total ..	–	3	2	2	–	–	7

Section 2

Prevalence and Control of Infectious Diseases

CERTAIN NOTIFIABLE DISEASES
ACUTE ANTERIOR POLIOMYELITIS
SALMONELLA INFECTION
INFECTIVE ENTERITIS
FOOD POISONING
BACILLARY DYSENTERY
OUTBREAK OF STREPTOCOCCAL TONSILLITIS
TUBERCULOSIS
VENEREAL DISEASES

TABLE 17

	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Smallpox	15	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria..	354	247	321	380	846	930	891	872	631	353	246	317	361	588	717	441	144	37	15	19	—
Scarlet Fever	1,282	920	781	997	1,588	1,230	1,194	867	896	771	309	302	946	1,543	820	703	409	464	765	531	490
Enteric Fever	11	6	48	17	7	8	10	9	4	28	26	13	8	2	2	3	8	4	—	—	—
Cerebro-Spinal Meningitis	13	7	9	10	1	10	9	21	13	6	67	72	85	32	41	24	16	24	14	12	7
Measles	2,884	3,592	2,774	4,186	2,878	2,505	3,663	1,682	4,724	742	3,760	1,734	5,328	803	551	4,449	64	4,808	1,027	3,406	3,018
German Measles	139	66	94	125	337	1,736	189	93	131	181	254	115	224	622	1,412	98	228	423	1,181	190	125
Whooping Cough	1,549	568	1,855	697	958	1,400	1,301	1,184	1,713	193	491	1,958	1,348	781	495	682	942	631	1,404	347	1,623
Infective Enteritis ..	20	11	56	61	11	2	7	41	22	41	5	11	13	2	2	252	98	259	212	167	445
Erysipelas	157	141	130	171	177	147	176	144	168	159	147	138	121	123	115	90	95	104	104	101	119
Puerperal Pyrexia ..	40	58	42	44	28	40	41	56	57	67	82	43	30	24	25	22	25	40	47	23	24
Puerperal Fever	35	41	25	17	18	5	20	6		—	—	—	—	—	—	—	—	—	—	—	—
Ophthalmia Neonatorum	40	27	15	18	23	13	23	28	21	12	15	19	13	20	13	15	36	29	25	16	20
Poliomyelitis	1	1	1	2	—	5	1	—	—	1	2		2	—	4	—	3	86	8	29	52
Polio-Encephalitis ..		—	—			1	1	1	—	—	1			—		1	1	5	—	3	2
Encephalitis Lethargica ..	7	2	1	2	1	2	2	1	2	—	2	1	1	—	3	2	—	1			—
Chicken Pox	1,629	1,763	1,475	1,646	1,720	2,169	1,276	1,788	1,705	1,352	1,544	1,228	1,276	1,623	1,413	805	861	927	1,599	1,268	1,639
Pulmonary Tuberculosis .	371	376	312	305	273	232	274	253	194	237	161	167	195	182	150	165	170	168	207	276	249
Other Forms of Tuberculosis	175	117	121	121	69	79	105	100	84	61	30	41	75	51	30	45	55	64	61	83	67
Anthrax	3	1	1	4	1	—	2	3	2	1	2								—	—	
Pneumonia .	172	670	631	636	337	361	499	514	428	342	382	490	506	430	195	251	241	289	338	445	399
Malaria	1	6	4	—	—	—	—		1			—	—	—					—		
Dysentery . ..	6	9	25	12	26	57	24	35	33	72	129	102	213	86	76	101	61	16	138	—	574
Vincent's Angina		—	—	—	—	—	—	—	—	—		3	24	1		1	—				
Pemphigus										1	18	6	3	—	8						

Section 2

Prevalence and Control of Infectious Disease

The diseases "notifiable" in Bradford are: Smallpox, cholera, diphtheria, membranous croup, erysipelas, scarletina or scarlet fever, typhus fever, typhoid fever, enteric fever, relaxing fever, plague, cerebral spinal fever, acute poliomyelitis, acute polio-encephalitis, acute encephalitis lethargica, ophthalmia neonatorum, puerperal pyrexia, malaria, infective enteritis, dysentery, acute primary pneumonia, acute influenzal pneumonia, measles, whooping cough, tuberculosis. In addition food poisoning is notifiable under Section 17 of the Food and Drugs Act, 1938.

The notifications of infectious diseases since 1929 are shown in the appendix.

It is gratifying to record the complete absence of any case of diphtheria. This means that the city has been free of the disease for practically two years, and we think it can be now safely considered that diphtheria is no longer endemic here. Stringent precautions, therefore, must be taken to prevent the re-entry of the organism into the city and also no effort must be spared to ensure that all young children are adequately immunised against this once dreaded disease.

Scarlet fever infections were slightly less than in 1949 and the condition remained mild. There was, however, an interesting outbreak of streptococcal tonsillitis amongst the nursing staff of a large hospital; t is described later in the report.

The number of cases of measles was rather less than in 1949. During 950, the number of cases of whooping cough notified showed a marked ncrease, but in the main we can say that the disease was not of a severe type. There were 57 cases of anterior poliomyelitis with 4 deaths. This was higher than in the previous year, but as will be noted, the deaths were less, both actual and proportionately.

There was an epidemic of sonne dysentery during the year involving 574 cases. No deaths occurred. This outbreak has been dealt with at some length later in the report. Once again there were no cases of anthrax notified. Notifications of pulmonary tuberculosis were 249.

Diphtheria

Cases: 0.

There were no cases of diphtheria in the city during the year, which means that we have now been free from this disease since February, 1949, a truly remarkable record, and one in which all who have helped with the immunisation campaign should feel proud. It is difficult to believe that only a short time ago there were between 800 and 900 cases of diphtheria, with 40 to 50 deaths every year. For example, in 1935, there were 891 cases with 53 deaths. This present happy state of affairs can only be maintained by ceaseless vigilance on the part of all concerned.

Scarlet Fever

Cases 490 Deaths 0 TABLE 17. *Mortality Rate per* 1,000 *in Previous Years*

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Bradford ..	0·03	0·03	0·03	0·07	0·06	0·08	0·02	0·00	0·00	0·00
England and Wales ..	1·16	1·25	0·05	0·03	0·02	0·02	0·01	0·01	0·00	0·00

The number of cases of scarlet fever notified in 1950 was 41 less than in 1949. The disease continued to be mild and there were no deaths. The greatest number of cases occurred in North Bierley West, where 46 cases were notified, and in Bradford Moor and North Bierley East, where 38 and 35 occurred, respectively.

TABLE 18 *Cases of Scarlet Fever month by month*

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of Cases ..	53	55	67	36	41	38	33	27	26	25	37	52

Smallpox

Cases 0.

No smallpox occurred during 1950, but several contacts of the Glasgow outbreak were followed up daily until the end of the quarantine period.

Measles

Cases 3018. Deaths 4

There were 578 less cases of measles in 1950 than in 1949, but there were 4 deaths as against 3 in the previous year.

Whooping Cough

Cases 1,623. Deaths 9

There were 1,623 cases of whooping cough as against 347 in the previous year. Although there was such a large number of cases the 9 deaths which occurred represented the same case mortality as in 1949. It will be noted, however, that 8 of the 9 deaths occurred in children under 1 year old.

TABLE 19 *Age Incidence of Notifications and Deaths*

	Under 1 year	1–5	5–15	15+
Notifications ..	138	1,040	430	15
Deaths	8	1	—	—

Erysipelas

Cases 119. Deaths 0

119 cases of erysipelas were notified during the year.

Ophthalmia Neonatorum

Cases 20. Deaths 0

Of the 20 cases of ophthalmia neonatorum notified during the year, none resulted in any permanent visual disability.

Pemphigus Neonatorum

Cases 3. Deaths 0.

The 3 cases of pemphigus neonatorum notified during the year wer of mild character.

Enteric Fever

Cases 0.

Once again there were no cases of enteric fever in the City during the year.

Anthrax

Cases 0.

Again, no cases of anthrax came to our notice during the year (which is once more a matter for congratulation).

Cerebro Spinal Meningitis

Cases 7. Deaths 3.

The number of cerebro spinal meningitis cases was low, but unfortunately the 3 deaths gave this disease a high mortality rate.

Pneumonia

Cases 399. Deaths 146.

There were 46 less cases than in 1949.

Influenza

Deaths 23.

TABLE 20

Year	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Deaths	62	64	29	115	29	38	41	20	6	76	23

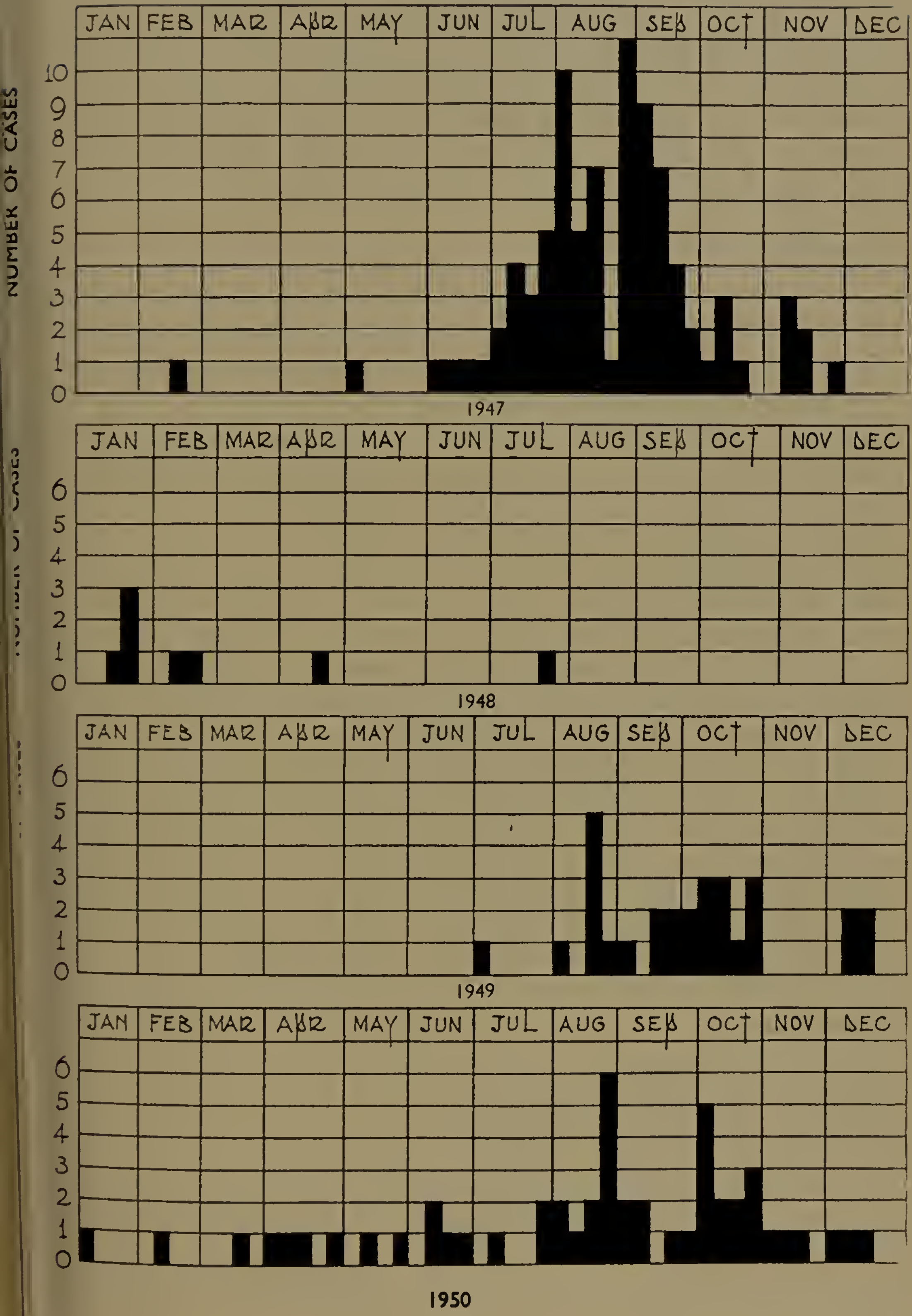
As the table shows 1949 has been the worst year since 1943.

Acute Anterior Poliomyelitis

Cases 57. Deaths 4.

During 1950 there were 57 cases of poliomyelitis as against 29 1949. There were 4 deaths and the following table shows the varyi

THE INCIDENCE OF POLIOMYELITIS
BRADFORD, 1947, 1948, 1949 AND 1950



degrees of disability which remained after the attack. It is apparent that although there were many more cases during the year, the cases themselves were not so severe. Each case was thoroughly investigated at the time of notification and a close watch was kept on the contacts.

End Result	Deaths	Severe Disability	Moderate Disability	Mild Disability	No Disability
Total	4	5	13	19	12

Salmonella Infection

Cases 13. Deaths 0.

It is interesting to record that of the 13 cases of salmonella infection, 5 were notified as enteritis and 2 as dysentery. The other cases came to light as a result of routine swabbing in a search for dysentery carriers. In 10 cases the organism involved was S. typhimurium, S. newport in 2 of the remaining cases, and the other S. dublin. Although all were followed up closely we were unable to discover how the infection had been acquired.

Infective Enteritis

Cases 445. Deaths 23.

The term infective enteritis is here used to include all manner of diarrhoea which came to the notice of the department and to which we were unable to assign a specific bacterial cause. All the notified cases were visited and specimens obtained in the same way as was done with dysentery notifications. It must be emphasised that all deaths from enteritis in children under two years came to our notice, whereas only a fraction of the total cases did so. Therefore, it is impossible to determine the exact case mortality for this condition. Of the 23 deaths, only 13 were notified to the Department during life.

Food Poisoning

Cases 105. Deaths 0.

TABLE 21 *Summary of Details*, 1950

Food Poisoning Notifications returned to R.G.

1st Quarter	Nil
2nd Quarter	39
3rd Quarter	8
4th Quarter	58
Total ..	105

Outbreaks Due to Identified Agents

Total outbreaks—Nil. Total cases—Nil.

Outbreaks due to:

(*a*)	Chemical poisons	Nil
(*b*)	Salmonella organisms..	Nil
(*c*)	Staphyloccoci (including toxin)	Nil
(*d*)	C.I. botulinum..	Nil
(*e*)	Other bacteria	Nil

Outbreaks of Undiscovered Cause

Total outbreaks—3. Total cases—105.

Single Cases

There was a single case in the third quarter. Total—1.

During the year 3 outbreaks of food poisoning came to our notice, nvolving a total of 105 cases.

The first outbreak occurred in a factory canteen where the preparation of food and general conditions were of a high standard. Although this outbreak was closely investigated we were unable to discover any specific organism which might have been responsible.

The second outbreak occurred in a mill canteen and 58 persons were affected. All pathological investigations were negative and in view of he short incubation period it was thought that the outbreak was due o a toxin present, most probably, in custard slices.

Another outbreak was believed due to pressed beef, and once again nvestigation failed to reveal any pathogenic organism. Unfortunately, ve were unable to sample any of the pressed beef alleged to have caused he trouble (as it had all been sold).

Considering the large number of meals eaten out in the city in canteens and restaurants, together with the consequent great number of people t risk, the record for the year can, I think, be considered satisfactory. t is pleasing to record that in each of the canteen outbreaks the manager oncerned immediately rang up the Health Department for help and dvice, which was gladly given.

Sonne Dysentery—Cases 574. Deaths 0.

Sonne dysentery is highly infectious, particularly in young children, in which age group most children develop symptoms and in consequence are most likely to infect others. Amongst small children in a nursery, infection is spread by direct and indirect contact, and we have found floors and toys in day nurseries harbouring the infecting organism. The infection can also spread through food but there has been no evidence that this has been a serious source of infection. In many cases the symptoms of Sonne dysentery are mild, but even in these mild cases it is several weeks before the child recovers completely its previous good health; a proportion of children are much more severely affected, and where there is some other abnormality, death may ensue.

Early in 1950, cases of Sonne dysentery began to appear; the number and age distribution are shown in the accompanying table.

Table 22

Under 1 year	1–5	5–15	15+
30	316	158	41

Arrangements were made with the general practitioners so that when a suspected case of dysentery was notified, specimens were collected by the sanitary inspectors for bacteriological examination to confirm the diagnosis. The general practitioner received the report direct from the laboratory and a copy was sent to the medical officer of health. This arrangement has been very successful and has probably increased the number of cases coming to our notice. Nevertheless, the figures for the year did not include more than a fraction of the cases which we believe actually occurred, since many persons do not seek medical advice unless the symptoms are severe.

As was to be expected the day nurseries and nursery schools proved to be important foci of infection. Many different methods of controlling the spread of infection were tried with varying degrees of success. So far as possible, as few children as was absolutely necessary were excluded from the nursery, in order not to disrupt industry. We have found that successful control depends on the recognition of the earliest symptoms by the nursery staff, together with early bacteriological confirmation, exclusion and treatment by the general practitioner. It is essential, of course, that the child be free from infection before returning to the nursery. It is interesting to note that with increased experience of this condition, cases came to be recognised earlier, with consequent diminution of spread.

During the year there were 9 outbreaks in the day nurseries and nursery schools in the city. This takes no account of the occasional isolated cases which were picked up by the staff later in the epidemic and thereby in many cases preventing a large outbreak.

In all a total of 231 children between the ages of 1 and 5 attending nurseries were affected, as against a total of 317 children in this age group who were affected.

Two outbreaks in hospital wards came to our notice during the year. These outbreaks were adequately controlled by the hospital medical officers in co-operation with the medical officer of health.

Flexner Dysentery Cases: 29. Deaths: 0.

A small outbreak of Flexner dysentery occurred in an institution for mental defectives. Dysentery of this type is usually more severe than Sonne dysentery and is particularly liable to appear in mental institutions from which it is very difficult to eradicate. The outbreak in this case was confined to two wards, one of which was infected by a patient transferred from the first ward. The infection proved particularly difficult to eradicate owing to the propensity of the children to develop a chronic carrier condition. A total of 26 patients were infected.

There has been no evidence of a spread of the infection to the general population although three members of the staff were infected.

Outbreak of Streptococcal Tonsillitis among the Nursing Staff of a Large Hospital

V. P. McDonagh, m.b., ch.b., d.p.h., *Deputy Medical Officer of Health*

Early in August 1950 it came to our notice that several nurses in a large hospital in the City had been simultaneously attacked with severe tonsillitis due to a haemolytic streptococcus. It appeared that the first case developed on August 8th; within the next 36 hours 17 more fell ill, and by the following day the total had risen to 26. Attached is a table showing how the cases developed.

Clinical Features

The attack was quite severe, with pyrexia, headache, malaise and sore throat. The appearance of the throats varied from slight inflammation with a few follicles to a severe reaction with a thick, dirty exudate covering both tonsils and bilateral glandular involvement. Almost all the reactions inclined to the severe but these responded quickly to intensive penicillin therapy. The haemolytic streptococcus type 25 was isolated from all the cases except one.

Epidemiological Investigation

It was clear with such a generalised and sudden infection that food or milk must be the likeliest source of infection, and enquiry revealed that all the affected nurses had eaten either the dinner or supper in the main nurses' dining hall on August 7th. No other cases in other members of the nursing staff or among the hospital patients occurred. Swabbing of all the staff revealed 5 cases to be infected although they had no symptoms.

Clinical and bacteriological examination of the staff failed to reveal a carrier and the method of preparation of the meals offered very little chance of bacterial contamination. The main article of food on the menu for both dinner and supper which was considered the likeliest source of infection was the corned beef, which was made up into a corned beef salad. The milk supply was investigated with negative results.

It is unfortunate that such an obvious and severe food-borne outbreak should occur in a particularly well-run kitchen, and it is disappointing not to get closer to the actual source of infection. However, thanks to the prompt action by the hospital authorities in isolating all the infected nurses, no spread of the infection to the patients was observed.

It was also thought that it might be interesting to discover how the attack rate varied with the presence or absence of tonsils, as it struck us, when looking at the throats of those affected, that many had large tonsils and only one had had a tonsillectomy. The matron kindly arranged for this information to be obtained, details of which are appended. From these details it would appear that Tonsillectomy decreased the nurses' chances of developing an infection.

TABLE 23

	AUGUST									
	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th
Cases ..	1	1	22	8	2	5	—	1	—	1

TABLE 24 *Tonsillectomy among Staff*

Tonsillectomy among Staff

41 cases	1 Tonsillectomy
56 unaffected ..	15 ,,

Tuberculosis

However regrettable the separation of the tuberculosis service into two parts may have been, it certainly has resulted in an increased awareness of the responsibility which Local Authorities must bear in the prevention of this social disease.

Comment was made in the 1949 report on the increase which has occurred in the number of notified cases of pulmonary tuberculosis and attention was drawn to the fact that there were many infective cases of this disease living in their own homes in most unsatisfactory conditions, sometimes occupying the same room, and even the same bed, as susceptible children. To minimise the spread of tuberculosis infection arising in such overcrowded families, it was decided to re-examine the housing circumstances of all cases on the tuberculosis register.

The number of patients on the register was 1,143 occupying 1,109 dwellings. 951 were found to be living in houses which, if not in every case ideal from the point of view of treatment, nevertheless contained sufficient accommodation to provide for the adequate isolation of the patient. The housing circumstances, however, of 192 patients occupying 158 houses (15 per cent) were such that adequate isolation of the patient was impossible.

The 192 cases have been divided into the following groups in order of urgency.

Group "A" or persons requiring immediate re-housing:

"A"	Bed Shared	Room Shared	Own Room	In Sanatorium at date of visit
Adults . .	43	16	2	20
Children . .	1	11	—	3

=96 cases.

Group "B" or second degree of priority for re-housing:

"B"	Bed Shared	Room Shared	Own Room	In Sanatorium at date of visit
Adults . .	28	26	7	5
Children . .	1	4	—	—

=71 cases.

Group "C" or third priority:

"C"	Bed Shared	Room Shared	Own Room	In Sanatorium at date of visit
Adults . .	9	9	4	1
Children . .	—	2	—	—

= 25 cases

non-satisfactory cases = 192

The rehousing of families in which one or more persons had been notified as suffering from pulmonary tuberculosis has always received a high degree of priority in Bradford. In fact, under the present points scheme, 5 per cent of all lettings of Corporation houses go to such families, and this is quite a reasonable yearly allocation in present circumstances to cater for new notifications. There is still left, however, the 158 patients disclosed by the survey as requiring immediate rehousing. The rehousing of this group of cases, and also new cases as they arise, presents difficulties under the present points system of allocating Corporation houses because absolute priority is not given to tuberculous patients as such.

This system puts the tuberculous patient on the same level as the ordinary applicant. He is given points for overcrowding, for dependants, etc., and his position is altered only by the allocation of additional points on medical grounds, which are limited to a maximum addition of 20. This in some cases is not enough to raise the total to the letting figure. Another difficulty is the rule that an applicant must have his name on the register 12 months before a house can be allocated, even if enough points have been given. A situation then arises where a patient, actively infectious, must continue to reside in his present overcrowded home, a danger to his children and his wife. The obvious place for such a patient is the sanatorium, but with the present shortage of hospital beds, particularly for male patients, there is a considerable waiting period before the patient can be admitted. The man is thus in the position that he can neither gain admission to a hospital bed nor get a suitable house.

It is estimated that if 15 per cent of all lettings during the next two years could be given to such families the waiting list of 158 cases would be cleared and that a subsequent yearly allocation of 5 per cent would be enough for new cases. The Estates Sub-Committee have been made aware of the above circumstances and it is anticipated that the contemplated revision of the points scheme will take into consideration the above facts.

The rehousing of a tuberculous family in a modern house will not in itself, of course, eliminate the possibility of spread of infection in a family. The systematic education of the patient, his wife and children in the means of preventing the spread of infection must be co-ordinated with his entry into the new environment.

The following report on the work carried out at the Bradford Chest Clinic has been kindly supplied by Dr. Harold Vallow, Consultant in Diseases of the Chest.

Chest Clinic

H. Vallow, M.D., D.P.H., Consultant in Chest Diseases

The Bradford Chest Clinic is open for general consultation on eleven sessions a week, one being held in the evening for workers and another kept specially apart for children.

The actual number of attendances during the year 1950 was 13,573, an increase of 2,609, of which 1,544 were new cases; in addition 10,545 men and women attended the Mass Radiography Unit for X-ray examination.

Cases diagnosed as definitely tuberculous are shown in the following tables:

	Adults		Children		Total	
	Male	Female	Male	Female	Male	Female
(*a*) Respiratory Tuberculosis	151	87	13	10	164	97
(*b*) Non-Respiratory Tuberculosis ..	10	5	7	6	17	11
Totals	161	92	20	16	181	108

Cases crossed off the register during the year are shown in the following table:

CASES CROSSED OFF THE REGISTER DURING THE YEAR

	Respiratory				Non-Respiratory				Totals			
	Adults		Children		Adults		Children		Adults		Children	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
(*a*) Recovered	15	7	2	6	1	3	—	7	16	10	2	13
(*b*) Died	55	32	—	—	2	2	3	—	57	34	3	—
(*c*) Removed to other Areas	8	4	—	—	—	1	—	—	8	5	—	—
(*d*) For other reasons ..	23	12	2	3	5	3	2	5	28	15	5	8

The number of persons on the Chest Clinic Register on December 31st, 1950, is shown in the following table.

Respiratory Cases				Non-Respiratory Cases				Total			
Adults		Children		Adults		Children		Adults		Children	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
628	413	49	50	45	50	36	28	673	463	85	78

The General Health Visitors paid 354 primary visits and 954 subsequent visits for Chest Clinic purposes, and 1,239 subsequent visits were paid by the Tuberculosis Visitor.

2,178 specimens of sputum were examined and 2,582 X-ray examinations carried out.

Examinations have been carried out for the Ministry of Pensions, the National Service Medical Board, the Ministry of Labour, the Ministry of Health, and the Pneumoconiosis Medical Panel (Ministry of National Insurance).

Welfare of the Tuberculous

Care and After-Care

Cases of tuberculosis eligible for tuberculosis treatment allowances have been referred to the National Assistance Board. Help is given at the Chest Clinic in claiming these and a close co-operation maintained with the Board and necessary medical evidence supplied.

Extra nourishment has been given on the advice of the Chest Physicians.

Recommendations for suitable work and for training have been made to the Ministry of Labour and individual cases discussed with the resettlement officer who pays routine visits to the Clinic.

Close liaison has been maintained with the hospital almoners in all matters affecting the welfare of the tuberculous and with the various charitable organisations.

Applications for houses have been considered and points assessed on medical grounds, giving individual attention to each case after consideration of clinical history.

	No. of cases
Housing Points assessed	127
Priority Certificates issued	728
Forms D.P.1.X (Ministry of Labour) completed ..	44
Treatment Allowances and Interviews re general welfare	419

Thoracic Surgery

A centre for major thoracic surgery has been established during the year at the Bradford Royal Infirmary, and a special ward has been set aside for this purpose; a large number of cases have been treated by artificial pneumothorax and pneumo-peritoneum at the sanatoria and at the Chest Clinic.

Mass Radiography 1950

Number of X-rays taken	10,545
Cases of respiratory tuberculosis found which were considered active and requiring treatment	11
Chest conditions found requiring observation:	
Tuberculous	30
Non-tuberculous	7
Abnormality found but no action required	40
Cases of non-tuberculous disease found and referred to a Doctor	84

Contacts

150 men, 220 women and 236 children have been examined; of these 11 men, 10 women and 5 children had manifestations of respiratory tuberculosis; 1 woman and 1 child had manifestations of non-respiratory tuberculosis.

On December 31st, in 9 men, 9 women and 53 children the diagnosis was not yet determined.

Admissions to Sanatoria

Admissions to Sanatoria are now arranged by the Sub-Regional Admission Bureau. During 1950 a total of 272 Bradford cases have been admitted to institutions as shown in the following table:

	M.	W.	B.	G.
Bierley Hall Sanatorium	43	29	—	—
Bradley Wood Sanatorium	—	1	2	3
The Hospital, Grassington	46	40	11	6
The Hospital, Middleton	14	18	8	7
Halifax Sanatorium, Shelf	—	1	—	—
Leeds Road Hospital (T.B. Section)	—	35	—	—
Iscoyd Park, Whitchurch	2	3	—	—
Other Institutions	2	1	—	—
	107	128	21	16=272

B.C.G.

On the recommendation of his medical advisers the Minister decided to introduce into this country the use of B.C.G. Vaccine on a limited and controlled scale.

As part of the arrangements B.C.G. has been offered to new entrants into the nursing profession whether in sanatoria or other hospitals.

In addition, the vaccine has been made available to chest physicians and other appropriate specialists who may wish to use it on their own medical responsibility in cases of special and known risk.

A large number of contacts have been tested and X-rayed but the number vaccinated has been small, mainly on account of the high number reacting to tuberculin, lack of suitable premises, and the difficulty of providing adequate segregation in this highly built-up area.

A survey of contacts is taking place so that a guide can be given for the future.

This has been an eventful year in the history of the Bradford Chest Clinic. Plans have been approved for the alteration of the laundry at St. Luke's Hospital for the construction of a modern chest clinic, the use of streptomycin and para-amino-salacylic acid has been extended to the homes, there has been a marked increase in the amount of active treatment in the form of lung collapse therapy; extra facilities for the X-ray of known contacts to definite cases have been granted and the introduction of B.C.G. on a limited and controlled scale has led to a survey of the contacts in the city. It is hoped that some solution will be found so that there will be a satisfactory integration of the preventive, curative and sociological aspects of this disease.

Further developments have been delayed on account of lack of suitable premises for the Chest Clinic and the need for more hospital beds.

No praise can be too high for the magnificent way in which the staff of the Chest Clinic have performed their duties under such cramped conditions.

Venereal Diseases

I am indebted to Dr. Charles Heywood, Consultant Venereologist for the following report :

The Venereal Diseases Treatment Centre at St. Luke's Hospital continues to be housed in a wooden army-hut of 1918 vintage. This has for long been condemned as unsatisfactory on the grounds of deficient accommodation, lack of amenities, and its discouraging effects upon patients. In particular there is a regretable absence of privacy between doctor and patient (more especially in the male clinic), and the accommodation for social and administrative work is inadequate. Plans for rehousing the treatment centre prepared in 1939 have not yet been implemented because of the war and post-war economic situation, but the urgency of the problem does not decrease. Nevertheless, within its structural limitations, the centre is well equipped and staffed to carry out the diagnosis and treatment of venereal diseases and is being continually improved.

The statistics for 1950 appear to mark the end of the post-war decline in the incidence of new infections, which is now only half of that in the peak year 1946, and compares favourably with pre-war figures. This is a reflection both of the greater efficiency of present-day methods of treatment, and of the increasing public awareness of the possible dangers of these diseases brought about by the intensive propaganda campaign of recent years. The effect of this propaganda is shown also by the increase in the proportion of non-venereal cases now presenting themselves for examination, amounting to more than half of the new admissions for the year.

That the incidence of new infections was not still lower in 1950 was due to the continued operation of two factors: (1) the presence in the area of about 5,000 European volunteer workers, in whom the incidence of venereal disease is much higher than in the native population, so that about one sixth of all new registrations were attributable to this source, and (2) the increase in the number of late cases of syphilis referred to the centre for treatment, so that the average age of patients attending has risen to about 50 years.

The number of new registrations and the attendances at the clinic during the past 20 years are shown in Table 25.

Year	Venereal Diseases		Non-Venereal Diseases		Total Attendances	
	Male	Female	Male	Female	Male	Female
1931	294	112	156	87	19·993	4·969
1932	336	111	146	68	16·720	4·243
1933	460	146	149	84	21·991	4·921
1934	386	96	188	78	19·811	5·471
1935	438	157	177	73	21·461	6·620
1936	277	131	140	63	15·714	5·237
1937	366	105	151	72	19·429	6·520
1938	363	134	197	88	15·622	5·869
1939	333	129	200	69	10·408	3·906
1940	278	100	143	69	7·687	4·916
1941	423	111	148	113	7·376	4·050
1942	304	156	140	91	6·639	5·266
1943	352	193	216	190	7·525	6·171
1944	292	221	223	221	7·530	6·797
1945	343	310	259	238	10·064	10·472
1946	815	291	554	212	16·487	10·677
1947	622	287	456	226	11·235	9·326
1948	358	229	440	144	9·040	6·859
1949	293	184	400	133	7·957	5·647
1950	228	148	431	155	7·659	4·582

Analysis of the Cases admitted and discharged during the year in detail

(*a*) ADMISSIONS

1. Number of cases under treatment or observation on 1st January, 1950	Males	Females	Total
Suffering from Syphilis	199	277	476
Suffering from Gonorrhoea	28	14	42
Suffering from other conditions	47	18	65
Totals	274	309	583

2. Number of cases defaulting during previous years which returned in 1950:	Males	Females	Total
Suffering from Syphilis	23	29	52
Suffering from Gonorrhoea	19	1	20
Totals	42	30	72

3. Number of new cases dealt with for the first time during 1950, suffering from:	Males	Females	Total
Early (infectious) acquired syphilis	33	23	56
Late acquired syphilis	27	34	61
Congenital syphilis	2	5	7
Gonorrhoea	91	41	132
Chancroid	1	—	1
Non-venereal conditions	427	153	580
Totals	581	256	837

4. Number of cases transferred from other treatment centres, suffering from			
Syphilis	25	13	38
Gonorrhoea	8	2	10
Other conditions	3	2	5
Totals	36	17	53
Total of items 1, 2, 3 and 4	933	612	1545

(*b*) DISCHARGES

5. Number of cases discharged after completion of treatment and surveillance, suffering from			
Syphilis	87	113	200
Gonorrhoea	96	34	130
Other conditions	416	152	568
Totals	599	299	898
6. Number of cases defaulting before completion of treatment or observation, suffering from			
Syphilis	24	33	57
Gonorrhoea	21	12	33
Totals	45	45	90
7. Number of cases under treatment or observation known to have died during 1950	10	6	16
8. Number of cases transferred to other treatment centres, suffering from:			
Syphilis	17	14	31
Gonorrhoea	10	3	13
Other conditions	7	2	9
Totals	34	19	53
9. Number of cases remaining under treatment or observation on 31st December, 1950, suffering from			
Syphilis	171	215	386
Gonorrhoea	19	9	28
Other conditions	55	19	74
Totals	245	243	488
Totals of items 5, 6, 7, 8 and 9	933	612	1545

The number of attendances distributed according to disease was a follows:

	Attendances		
	Male	Female	Total
Patients suffering from Syphilis	4334	3634	7968
Gonorrhoea	927	270	1197
Other conditions	2398	678	3076
Totals	7659	4582	12,241

The geographical distribution of new cases during the year is shown in the following table:

Area	Syphilis	Gonorrhoea	Other conditions
Bradford	101	109	455
West Riding County Council ..	22	20	113
Colne	—	—	1
Dewsbury	—	—	1
Halifax	—	—	4
Leeds	1	—	6
Service	—	2	—
Middlesbrough	—	1	—
Liverpool	—	—	1

An adequate number of beds is provided at St. Luke's Hospital for in-patient treatment of venereal disease where necessary.

Pathological examinations for the diagnosis and surveillance of venereal diseases are carried out both at the Treatment Centre and at the Public Health Laboratory, Edmund Street, as shown below:

Pathological Examinations, 1950

	Treatment Centre	Public Health Laboratory
Microscopical examinations for syphilis	83	—
Microscopical examinations for gonorrhoea ..	1474	—
Cultural examinations for gonorrhoea	—	984
Blood tests for syphilis	—	3134
Blood tests for gonorrhoea	—	1
Cerebro-spinal fluid examinations	—	298
Others	45	4

Defaulters continue to provide a serious problem. These patients discontinue attendance at the treatment centre before the certainty of cure has been established, and it is likely that many of them suffer infectious relapse and become again a danger to the health of the community; many of these inadequately treated patients develop in later years killing or crippling complications of their disease, to become the prematurely sick and infirm cases overflowing the chronic hospital beds. Of the 892 cases of venereal disease dealt with during the year, 90 defaulted before the completion of surveillance (slightly more than 10 per cent). So rapid are present-day treatment schedules however, that only 12 of these defaulters were lost before completion of their treatment, and there is reasonable hope that the remaining 78 have been rendered permanently non-infectious if not cured (so far as their present infection is concerned).

Section 3

Care of Mothers and Young Children

- CLINICS AND BRANCH CLINICS
- PREMATURE BABIES
- CARE OF UNMARRIED MOTHERS AND THEIR CHILDREN
- MATERNITY CARE COMMITTEE
- DAY NURSERIES
- DOMICILIARY MIDWIFERY
- MIDWIFERY TRAINING SCHOOL
- DENTAL CARE OF MOTHERS AND THEIR CHILDREN
- HEALTH VISITORS
- HEALTH VISITORS TRAINING SCHOOL
- VACCINATION AND IMMUNISATION

Care of Mothers and Young Children

H. M. Gall, m.b., ch.b.,

Senior Assistant Medical Officer of Health for Maternity and Child Welfare

Care of Mothers and Young Children

During the year several extensions were made to the department. In April a branch clinic in Muff Field and in July another in Thornton were started in response to petitions from mothers in these districts. In November the new branch clinic at Usher Street, the day nursery at Thornlea, Clayton, and Oakwell House for the accommodation of unmarried mothers and their infants were completed and opened by the Chairman of the Health Committee.

There were changes in the staff due to resignations and retirements, and it was not always possible to make new appointments quickly to fill vacancies. In particular it has been difficult to find nurses for the public health nursing service in all its branches. Health visitors, midwives and nursery staffs have all been depleted. There were disappointingly few applications for the Health Visitors' Training Course and this will delay the building up of the Health Visitors' Service.

The new branch clinics opened in the Muff Field and Thornton districts are child welfare centres only; the former has been well attended, the latter less well.

The new premises at Usher Street which were opened in November consist of a complete clinic unit with consulting rooms, provision for child welfare and ante-natal clinics, and a hostel for three district midwives. There is a waiting hall with a canteen which will be used for health talks, film shows and mothercraft classes. The child welfare session held at the Mothers' Club, Wakefield Road, was discontinued when the new premises became available, and ante-natal cases attending the Southend Hall clinic were also transferred.

Ante-Natal Clinics

The number of women attending Ante-Natal Clinics during the year has been good. There is an apparent drop in the number of new cases as compared with the previous year because for the first three months of 1949 the central clinic was used as a booking clinic for hospital beds. The figures for the two years are not therefore strictly comparable. Six sessions weekly are held at the central clinic and three at district clinics. One session at the central clinic is devoted to post-natal examinations. Times are as follows:

Central Clinic

Monday, Tuesday, Wednesday, Thursday and Friday mornings: 9 to 11 a.m.
Friday afternoon: 1.30 to 3.30 p.m.

Ante-Natal patients are also seen at the following branch clinics during the ordinary child welfare session:

Usher Street—Wednesday morning: 9 to 11 a.m.
Idle—Tuesday afternoon: 1.30 to 3.30 p.m.
Bierley—Alternate Wednesday morning: 9 to 11 a.m.

	Cases	Total Attendance	New Cases
Ante-Natal	1,133	3,460	933
Post-Natal	120	130	113

The number of post-natal attendances was slightly higher than in the previous year but too many women continue to neglect this safeguard which would ensure their complete return to health after pregnancy and confinement.

Child Welfare Clinics

The number of new cases under 1 year attending welfare centres was 3,500, approximately 68 per cent of the live births during the year. Although branch clinics in the central areas continue busy, the attend ances are less than previously. Mothers with young children are increasingly being transferred to the new housing estates where it is difficult to find suitable premises for weekly clinics. As an alternative to the Health Centre which has not materialised, consideration might well be given to the use of the Community Centre, if such is available, for the purpose of Child Welfare and Ante-Natal Clinics. One hundred and seventeen sessions per month were held at 18 centres.

No. of children attending		9,106
First Attendances:		
Under 1 year of age	3,500	
Over 1 year of age	130	
		3,630
Total attendances of:		
Infants under 1 year	48,909	
Children over 1 year	15,294	
		64,203

Petitions from West Bowling and Thornton for clinics in these areas were favourably considered by the City Council and new branches were opened at Muff Field Chapel, West Bowling, on the 14th April, 1950, and at the Mechanics' Institute, Thornton, on the 28th July, 1950.

Child Welfare Clinics in Bradford

Clinic	Days of Attendance	Time of Attendance	Attendances during year
Central, Edmund Street	Daily	Morning and Afternoon	19,068
Southend Hall	Thursday	Afternoon	1,907
Green Lane	Monday and Thursday	Afternoon	5,848
Otley Road	Wednesday	Morning and Afternoon	5,499
Brownroyd	Tuesday	Morning and Afternoon	5,238
Great Horton	Monday	Morning	2,523
Wakefield Road	Alternate Wednesdays	Afternoon	1,175
Low Moor	Tuesday	Afternoon	3,874
Lapage Street	Monday and Thursday	Afternoon	5,083
Idle	Friday	Afternoon	2,375
Ravenscliffe	Friday	Afternoon	3,074
Clayton	Alternate Wednesdays	Afternoon	1,410
Bierley	Thursday	Afternoon	1,948
Esholt	Wednesdays monthly	Afternoon	192
Nursing Mothers' Ward	Monday, Tuesday, Wednesday and Friday	Morning and Afternoon	822
Daisy Hill	Alternate Mondays	Morning	1,549
Lidget Green	Alternate Thursdays	Morning	1,314
West Bowling (Muff Field)	Friday	Morning	1,642
Thornton (Mechanics' Institute)	Friday	Afternoon	551

Premature Babies

During the year special efforts were made in hospitals and homes to care for prematurely born infants. Among these infants are included infants born at home, but who because of factors influencing development in the ante-natal period, are under the normal average birth weight. During the year 332 such babies were notified. This, however, does not give a true picture of the premature birth rate for the city. To appreciate the wastage of infant life due to prematurity there must be included premature infants who were stillborn.

These babies are the special care of the midwife and health visitor. In the lying-in period necessary nursing equipment is loaned to the home and the midwife pays many extra visits. The case is also visited by the superintendent midwife during the first fortnight and later the health visitor pays weekly visits. If the infants are very premature and are very delicate they are transferred to hospital, and for this special equipment is available as the transfer itself is not without danger to the child. Under good home conditions the average infant of 7½ to 8 months gestation does very well, if special precautions are taken to keep the child in an even temperature and protect him or her from infection.

Premature Infants born Alive

Number of premature babies		355
Number born in Institutions	227	
Number born at home	105	
Number born in Nursing Homes	23	
Number who died within 24 hours		28
Institution	22	
Home	3	
Nursing Homes	3	
Number who died 2—28 days		8
Institution	6	
Home	1	
Nursing Homes	1	
Number who survived 1 month		319

Of the 254 *premature babies in* 1949 *and living at the end of that year:*

8 died during 1950

246 were living at the end of 1950.

Care of Unmarried Mothers and their Children

The number of illegitimate births during the year was 358. Special consideration is given by all members of the staff to the problems of unmarried mothers whose difficulties are reported to us by workers in every sphere of social welfare. Hospital confinement is always arranged if this is necessary, as it is in most cases. When the mother is able to return to work the health visitor makes special efforts to keep in touch with mother and baby. This is not always an easy matter as the unfortunate mother is often obliged to move from one lodging to another. Because of the needs of such mothers Oakwell House was opened in November 1950 as a hostel. To this Home girls will be admitted in the late stages of pregnancy and to it they will return after their confinement in hospital. When they are able to go to work again they will continue to live in the hostel with their infants for some months until they have time to find suitable lodgings. It is hoped that the months they spend in the hostel while giving them an opportunity to learn mothercraft and housecraft will also give the grandparents time for reflection and forgiveness and that many of the girls will be taken back with their babies into their own homes.

The Home has accommodation for 16 girls and their children. The nursery will to some extent help the shortage of accommodation in the day nurseries and the babies will have a better start in life than is commonly possible for the illegitimate child.

Two mothers and their babies and one expectant mother were admitted in December.

Grants were made to the Bradford Diocesan Council for their work at St. Monica's Home for unmarried mothers and to the Leeds Catholic Diocesan Welfare Society in respect of unmarried mothers from Bradford admitted to St. Margaret's Home, Leeds.

Admitted from Bradford to St. Monica's ..	11
Admitted from Bradford to St. Margaret's ..	6

Maternity Care Committee

The Bradford Maternity Care Committee came into being during the first world war and formed Mothers' Clubs to carry out educational and social work among the mothers attending the Maternity and Child Welfare Department. Whenever possible, these Mothers' Clubs are held on the same premises and at the same day as the branch clinics, and close co-operation is observed between the two. The work carried out at the Club is mainly sewing, cookery, toy making and crafts suitable for home making. Clubs are held at Lilycroft, Wakefield Road, Otley Road, Manningham and Girlington, and it is hoped to extend the work to more districts when rooms are available. During the work of these Clubs the great need became apparent for convalescent and holiday treatment for the mothers and young children who attended the Centres, many of whom never had a break of any sort from one year to another. The Committee first obtained two cottages in Addingham, and there created a small convalescent home for mothers and children. When the Silver Jubilee of King George V and Queen Mary took place, the Bradford Corporation decided to celebrate this event by purchasing a home at the seaside, and giving a grant towards its upkeep. The administration of this home was handed over to the Maternity Care Committee. Premises were secured at Heysham, and this Silver Jubilee Home, as it is called, is now working to full capacity and many mothers and young children have been restored to health through its beneficient work.

Day Nurseries

There are seven Municipal Day Nurseries in the City which are well attended and there is a large waiting list, as many women who wish to work cannot do so until their children are admitted to the nurseries.

Thornlea Day Nursery, Clayton, for 30 children from 0—5 years, was opened in November 1950. This adapted house has made an excellent nursery and was already fully attended by the end of the year.

The opening of this nursery brought the number of municipal day nurseries to 8. There has been a succession of outbreaks of infection in the nurseries during the year which have necessitated periods of quarantine. Very young children are particularly prone to infections affecting the respiratory and gastro-intestinal systems.

List of Nurseries

Name	Age of Children	Places	Yearly Attendances
Swain House Day Nursery	0–5	30	12,173
Canterbury Avenue Day Nursery . .	0–5	40	15,303
Bierley Day Nursery	0–5	40	15,329
Thornbury Day Nursery	0–5	40	16,547
Greaves Street Day Nursery . .	2–5	30	10,991
Princeville Day Nursery	2–5	40	15,160
Farcliffe Nursery	0–5	66	29,629
Thornlea Day Nursery	0–5	30	1,216

Priority is given to children whose mothers must work, e.g., to illegitimate children who are always particularly in need of care; to the children of widows and the children whose fathers are incapacitated from any cause.

The nurseries are regularly visited by a doctor from the staff of the maternity and child welfare department. There are also six industrial nurseries in the city, at four of which at the request of the directors regular clinics are held. Every effort is made to ensure that the children attending nurseries and requiring medical or specialist treatment receive this.

In conjunction with the Education Committee the Health Committee undertake the training of students for the examination of the Nursery Nurses Examination Board. The course lasts for two years and the intention is to limit the number of new pupils to 20 annually. During their two years' practical training the pupils spend one year in health department nurseries and receive theoretical instruction on two days weekly. Students who completed training during 1950 were successful in passing the examination.

Domiciliary Midwifery

The supervision of all midwives in the city apart from those practising in hospital is undertaken by a non-Medical Supervisor under the direction of the Senior Assistant Medical Officer for Maternity and Child Welfare.

The Municipal Midwives are seen at least once a week and the midwives in private practice are also inspected at regular intervals. In accordance with the provisions of the Nursing Homes Registration Act, 1927, Maternity Homes have been inspected regularly throughout the year. During the year 85 midwives notified their intention of practising in the City as follows:

	Notification of Int. to Practice	Cases Attended as	
		Midwife	Mat. Nurse
Municipal Midwives	37	2,011	192
Midwives in Private Practice..	4	—	9
Midwives in Nursing Homes ..	8	108	383
Midwives in Hospital	36	2,078	318
	85		

The establishment of municipal midwives is 37 midwives and one non-medical supervisor.

The number of midwives on the staff at 1st January 1950, was 35.

Eight midwives retired or resigned during the year.

Five new appointments were made from pupils trained in the Bradford Midwifery Training School.

The work of the domiciliary midwife is hard and the sickness and accident rate high. She is on duty for 24 hours of the day and much of her work is done at night when no public transport is available. The service continues to attract women of a high standard and every effort is made to implement the recommendation of the Rushcliffe Committee in regard to holidays and off-duty times. Car allowances are paid to four midwives who own cars.

Analysis of Cases

Municipal midwives attended 2,203 cases during the year.

Births: 2,189.	Attended as Midwife ..	1,996
	Attended as Mat. Nurse ..	193

To this number must be added:

60 cases transferred to hospital in the ante-natal period.
79 ,, ,, ,, ,, during labour.
18 ,, ,, ,, ,, after labour.

Municipal midwives made 21,543 ante-natal and 36,418 post-natal visits.

There were three maternal deaths during the year, two at home and one after transfer to hospital.

Medical aid was required by midwives on 967 occasions, and these cases are sub-divided as follows:

	Mothers	Babies
Cases who had arranged obstetric medical service	451	84
Midwives cases	340	92

NATIONAL HEALTH SERVICE

BRADFORD EXECUTIVE COUNCIL

Statement showing the number of cases where Maternity Medical Services have been provided by Medical Practitioners during the period 1st January, 1950, and 31st December, 1950.

MATERNITY MEDICAL SERVICES

Part A.—1st January to 31st December, 1950

Description of Services—	By General Practitioner Obstretitians	By other G.P.'s to persons on their own Lists	Total
1. No of cases in which complete maternity medical services provided	1,707	56	1,763
(*a*) No of such cases in which the Doctor providing the services was in attendance at the confinement	853	3	856
2. No. of cases in which period I only provided	662	16	678
3. No. of cases in which period II only provided	62	—	62

Part B.—Cases carried over from 1949 *because they were not included in the* 1949 *return*

		By General Practitioner Obstretitians	By other G.P.'s to persons on their own lists	Total
1.	(*a*) No. of cases in which complete maternity medical services provided	319	1	320
	(*b*) No. of such cases in which the Doctor providing the services was in attendance at the confinement	172	—	172
2.	No. of cases in which Period I only provided	152	7	159
3.	(*a*) No. of cases in which Period II only provided..	17	—	17
	(*b*) No. of such cases in which the Doctor providing the services was in attendance at the confinement	8	—	8

Gas and Air Analgesia

Gas and Air analgesia was requested by ..	1,828 cases
administered in	1,605 cases
was not available in	223 cases

The number of women who were unable to have analgesia is disappointingly large, but until (nearly) all midwives have their own cars and are responsible for their own gas and air apparatus there will be occasional unavoidable delay in getting the apparatus to the home. The arrangements for transport of the machines are now made by the Ambulance Service. Transport for the midwives themselves is also arranged, if necessary, at night when public transport is not available and midwives are relieving in a district other than their own

Midwifery Training School

The school was fully attended throughout the year and pupils have given great assistance to the domiciliary midwives.

Pupils in training at January 1st, 1950	12
,, ,, ,, ,, December 31st, 1950	11
Pupils who gained their certificate during the year	24

Pupils assisted at 635 cases and pupils themselves delivered 26 infants.

One midwife was appointed from the school to the domiciliary midwifery service during the year and three others were appointed to commence duty on 1st January, 1951.

Dental Care

H. S. SHOESMITH, L.D.S., *Dental Officer.*

The dental work of the department has continued to fill a great public need in providing treatment for expectant and nursing mothers and children under five years of age. The importance of this work, both in its curative and preventative aspects, cannot be over-emphasised. Regular visits continued to be paid to the day nurseries, and those children requiring dental treatment were seen at the dental clinic and treated there. In this way it is possible to preserve teeth which, if left untreated, would have caused pain and would have required premature extraction. Periodic visits were also continued to Grassington Sanatorium under agency arrangements. In view of the shortage of school dentists, help was also given at the school dental clinic, and this help was reciprocated by the chief school dental officer attending at special anaesthetic sessions at the child welfare dental clinic. A certain number of school children were also referred for special treatment in the form of regulation work, root fillings and the provison of dentures. Operations have been carried out as painlessly as possible, and anaesthetics, both local and general, are used for extractions and, where necessary, for fillings.

DENTAL TREATMENT PROVIDED FOR EXPECTANT AND NURSING MOTHERS AND YOUNG CHILDREN

(*a*) Numbers provided with dental care.

	Examined	Needing Treatment	Treated	Made Dentally fit
Expectant and Nursing Mothers	261	248	248	245
Children under five	1131	998	991	986

(*b*) Forms of dental treatment provided

	Extractions	Anæsthetics Local	Anæsthetics Gen.	Fillings	Scalings or scalings with gen. Treatment	Silver Nitrate Treatment	Dressings	Radiographs	Dentures Provided Com-plete	Dentures Provided Partial
Expectant and Nursing Mothers ..	566	57	150	158	42	–	40	–	31	42
Children under five	1,538	2	895	352	—	5	18	–	–	–

1. Patients requiring X-ray examination are sent to St. Luke's Hospital, Bradford.
2. Dentures required are made by a local dental mechanic to the profession.

Health Visiting

During the year it was not possible to increase the number of Healt Visitors as, despite the appointment of five new health visitors from th Training School, there were four resignations and one retirement Three clinic nurses were appointed during the year to assist the Healt Visitors in the work of clinics. The shortage of Health Visitors mean that often several districts in the city are without a Health Visitor fo long periods and that only urgent and special visits can be made. Th Health Visitors during the year made 72,460 visits as follows:

Visits to Babies up to one year	Children between the ages of one and five	Infectious Diseases	Tuber-culosis	Expectant Mothers	After-Care	Old People	Special Visits
28,547	35,042	4,390	1,298	2,234	211	196	542

4,796 babies under one year were visited, and the average number visits paid during the year to each child was seven, an increase sinc last year.

Since 1948 the field of work of the Health Visitor has widened include the family as a whole. Because Health Visitors are still too fe in number and because liasion with other bodies is not as good as might be, we cannot say that the Health Visitors' Department is undertaking all the work envisaged in the National Health Service Act, 1946. Co-operation with Hospital Almoners has been well established, and as a result After-Care visits have increased. The visitation of aged persons is carried out where information is available, but there are still no recognised channels through which information comes from Statutory Committees and Voluntary Organisations interested in the welfare of the elderly.

Health Visitors Training School

The second course of training was completed in April 1950. Five students of the six appointed by Bradford were successful in obtaining the H.V. Certificate of the Royal Sanitary Institute, and immediately joined the staff of the Health Visitors' Department to finish their contract of one year's post-graduate work. This, unfortunately, did not increase the establishment of the department, as by the end of 1950 there had been four resignations from the permanent staff and one retirement.

Applications for the 1950-51 course of training were so few that the course was discontinued in Bradford temporarily and arrangements were made for three students to train at Leeds University.

During the year the Council approved a revision of the terms of appointment for student health visitors, and it is hoped that in consequence there will be a greater number of applicants for training in future years. The shortage of health visitors continues to affect the usefulness of the department, and permanent members of the health visitors' staff cannot hope to carry out all their duties as they should.

Vaccination and Immunisation

Smallpox Vaccination

During the year 1950 there were 682 primary vaccinations and 448 revaccinations, as against 246 primary and 104 revaccinations in 1949.

This marked increase is largely due to vaccinations among adults who are at "special risk," for example, nurses, although there has been some slight increase also among primary vaccinations in small babies. The health visitor's staff have continued to encourage parents to have their children vaccinated against smallpox, but in view of the long time since there was a severe outbreak, and to the shortness of the public memory, the efforts have not borne great fruit. The Local Health Authority also arrange for general practitioners to provide free vaccination against smallpox and also immunisation against diphtheria for all persons in the area who might desire this service.

Diphtheria Immunisation

During the year 4,391 children under 15 years of age were immunised against diphtheria, as against 5,917 children in 1949. Of this total 2,482 immunisations were carried out by Medical Officers of the Health Department and 1,909 by General Practitioners. It is regrettable to have to record this fall in diphtheria immunisation, and it is hoped to take strong measures during the forthcoming year to bring about an increase once more in the number of children immunised. As with smallpox, there is always the danger of parents not bothering to have their children immunised now that the dread results of diphtheria have been largely forgotten (by the present-day parent). On the 31st December it was estimated that 42 per cent of children under 5 years of age and 60 per cent in the age group 5 to 15 had been immunised against diphtheria. During the year the use of the more refined Antigen (P.T.A.P.) has continued, and the special follow-up work in connection with the Medical Research Council Survey was continued. There has been, however, as yet, no report on the results.

Whooping Cough Immunisation

The number of children immunised against whooping cough in 1950 was 312. As in previous years, no special efforts were made to encourage this immunisation as it is not yet known which of the vaccines, if any, is the most reliable. The large-scale experiments which are being conducted by the Medical Research Council throughout the country have continued, and as yet no firm decision has been reached as to which is the best vaccine.

Section 4

School Health Service

STAFF
CO-ORDINATION
SCHOOL HYGIENE
MEDICAL INSPECTION
CHIROPODY
INFECTIOUS DISEASES
CO-OPERATION WITH PARENTS, ETC.
NUTRITION
UNCLEANLINESS
DISEASES OF THE SKIN
VISUAL DEFECTS AND EXTERNAL EYE DISEASE
NOSE AND THROAT DEFECTS
EAR DISEASE AND HEARING
DENTAL DEFECTS
ORTHOPÆDIC AND POSTERIOR DEFECTS
HEART DISEASE
OTHER DEFECTS AND DISEASES
FOLLOWING UP TO SCHOOL NURSING
ARRANGEMENTS FOR TREATMENT
PHYSIOTHERAPY DEPARTMENT
ULTRA VIOLET RAY THERAPY
HANDICAPPED PUPILS
MARGARET MACMILLAN DAY SCHOOL FOR SUBNORMAL CHILDREN
LISTER LANE SCHOOL FOR PHYSICALLY EDUCATIONALLY HANDICAPPED PUPILS
DAISY HILL SCHOOL FOR PARTIALLY SIGHTED
BOLTON ROYD SCHOOL FOR THE DEAF
LINTON RESIDENTIAL OPEN AIR SCHOOL
SPEECH THERAPY
CHILD GUIDANCE
DENTAL REPORT BY H. MORRELL, L.D.S.
MEDICAL INSPECTION RETURNS
PHYSICAL EDUCATION BY F. J. C. MARSHALL

City of Bradford Annual Report of the School Medical Officer 1950

School Medical Officer:
JOHN DOUGLAS, M.D., D.P.H.

Deputy School Medical Officer: V. P. McDONAGH M.B. Ch.B. D.P.H.

Senior Assistant School Medical Officer: V. H. ATKINSON, M.B., D.P.H.

Assistant School Medical Officers:

P. VIEYRA, M.D., D.P.H.
DORIS M. LANGLEY, M.B., D.P.H.
J. D. BRYAN, M.B., D.P.H. (left 31/5/50)
C. E. PHILLIP, L.R.C.P. & S., D.P.H. (left 18/9/50)
M. K. ROSE, M.B., Ch.B. D.P.H.
ROXY GLOSSOP M.B. (appointed 1/6/50)
JOAN N. LEEDHAM, M.B. (appointed 9/10/50)

Specialist Officers:

Ophthalmic Surgeon: JOHN BENSON, F.R.C.S.
Orthopaedic Surgeon: A. NAYLOR, Ch.M., M.SC., F.R.C.S.

School Dental Surgeons:

H. V. MORRELL, L.D.S., R.F.P.S. (Glas.)
S. HALL, L.D.S. (Liv.)

Physiotherapists:

Miss K. E. HUTTON, Central School Clinic
Miss E. M. MORRIS } Lister Lane P.H. School
Miss V. N. CRIBB }

School Nurses:

S. COULTHARD, E. M. BENTLEY (left 30/4/50), J. McCARTHY (left 28/2/50), K. HEINEMAN, M. H. GRAHAM (left 30/9/50), D. O'CONNOR, C. M. HAMILTON, M. KAY, L. CROSSLAND (left 31/12/50), M. VAN SWANENBERG, L. KELLETT (left 31/8/50), B. SHIRES, A. LONG (left 31/8/50), M. GOLDMAN, J. E. DAVIES, J. E. HUNT, E. M. HEWITT (appointed 2/10/50), M. CARTER (appointed 27/11/50), A. QUAIN (left 25/11/50).

Speech Therapist: Miss M. AYRTON

Child Guidance Clinic:

Psychiatrist: H. EDELSTON, M.B., D.P.M.
Educational Psychologist: Mrs. B. BROOK, B.A.
Psychiatric Social Worker: Miss PICKERING

City of Bradford School Health Report

School Health Service

V. H. Atkinson, m.b., d.p.h., *Senior Assistant School Medical Officer*

The School Medical Officer is also Medical Officer of Health and the closest co-operation exists between all branches of the Medical Staff dealing with childhood. For this purpose there is a Joint Health and Education Special Sub-Committee which deals with questions affecting the School Medical Department.

School Hygiene

On the occasion of each routine inspection of the children at the School the Medical Officer surveys and reports upon the hygienic conditions of the school.

The following table is an analysis of the hygienic conditions tabulated from the summary sheets which are completed by the Medical Officers at the close of each school inspection:

Items in Schools reported on			Conditions Found County Schools Inspected 112	Conditions Found Voluntary Schools Inspected 58
1. Surroundings:	Open		82	35
	Congested		30	23
2. Ventilation:	Natural—	Satisfactory	100	52
		Unsatisfactory	12	6
	Artificial—	Satisfactory	60	31
		Unsatisfactory	4	1
3. Lighting:	Natural—	Satisfactory	98	56
		Unsatisfactory	13	2
	Artificial—	Satisfactory	72	44
		Unsatisfactory	22	3
4. Heating:	Satisfactory		96	56
	Unsatisfactory		16	2

5. Furniture:			
(a) Desks: Old-fashioned—	Satisfactory	66	48
	Unsatisfactory	30	5
Modern—	Satisfactory	16	5
	Unsatisfactory	—	—
(b) Blackboards:	Satisfactory	102	58
	Unsatisfactory	10	—
6. Water Supply:			
(a) Washing (towels, etc.):	Adequate	86	52
	Inadequate	36	6
(b) Drinking Cups:	Sufficient	88	58
	Insufficient	24	8
7. Cloakroom			
(a) Condition:	Satisfactory	92	43
	Unsatisfactory	20	15
(b) Arrangements for drying clothes, etc.:	Present	23	21
	Absent	89	37
8. Walls and Floors: Condition and Cleanliness—			
	Satisfactory	66	41
	Unsatisfactory	46	17
9. Sanitary Conveniences:			
(a) Lavatories—	Satisfactory	66	38
	Unsatisfactory	38	17
	Satisfactory but insufficient	8	3
(b) W.C.'s—	Satisfactory	66	38
	Unsatisfactory	37	20
	Satisfactory but insufficient	9	3
(c) Urinals—	Satisfactory	71	37
	Unsatisfactory	37	20
	Satisfactory but insufficient	1	—
10. Playgrounds:	Satisfactory	74	30
	Satisfactory but inadequate	12	12
	Unsatisfactory	26	16

Medical Inspection

During the year 1950 the School Health Service continued its efforts to maintain and improve the welfare of Bradford children. The basis of activities was the periodic inspections of four age groups: entrants to the infant schools, pupils due to leave the primary department, thirteen-year-olds in the secondary modern departments and all children over twelve in the grammar schools.

As most schools are still without reserved accommodation for medical use we much appreciate the readinesss with which the staff-room or a classroom is placed at our disposal, also many other examples of cheerful co-operation by head teachers and their assistants. Nothing is more highly valued than the presence of a teacher during inspections when defects can be considered jointly, and any necessary modification of a child's curriculum arranged at once. Many children, especially in the infant and primary schools, were accompanied by their parents, who valued the time-saving merits of an appointment notifying system; they showed an increasing willingness to accept advice and carry out suggested treatments. These agreeable circumstances were reflected in trusting participation of even the youngest examinees.

The general standard of health was good though variations according to income levels were detectable; the benefits of meals, milk and supplementary foods were most evident in the poorer districts. Often the desirability of earlier bedtimes needed to be stressed. Many cases of slack posture were amenable to attention in the gymnasia without reference to our professional physiotherapist; it is hoped that such correction and lasting habits of better muscle tone will soon be developed throughout all primary and secondary schools.

Major deformities, active tuberculosis and other gross lesions were rarely encountered. The incidence of visual defects warranted comprehensive sight testing as soon as possible, more squints among young children were consequently found and the lists of such cases needing surgical treatment in hospital lengthened remarkably.

Mr. W. O. Lodge's long service as Consultant Oculist ended in December 1949. He was succeeded in January 1950 by Mr. J. Benson who devoted two sessions per month to the Central Clinic and one session to the Daisy Hill Special School for Partially Sighted Children. It is greatly regretted that there is no comparable Ear, Nose and Throat Consultant allocated to our Service who could work one session per month at the Special School for Deaf Pupils.

Every school had a periodic medical inspection during the twelve months, arrangements accorded with the Ministry's regulations. Most serious defects had been recognised before the children reached school age.

On admittance to school all major defects seen by the teachers are notified to the Medical Officer who examines the children at once. A census of all children in the City of school age is taken annually by the School Attendance Officers, and children who have reached five years of age and whose names are not on any school register are reported to the School Medical Officer, who has each case either medically examined at the clinic or obtains satisfactory medical evidence that the child is not fit to attend school. Many of these cases are treated at School Clinics or Hospitals.

Children's Feet

Free chiropody was introduced by the welcome advent of Mr. Dalby; the one hundred per cent acceptance rate expresses due appreciation.

During the period 11th May to 31st December 102 children have been treated at the Central School Clinic, an average of 12 children attended each weekly three-hour session, totalling 396 visits on 32 sessions; each child making on an average four treatment attendances before discharge, excluding a routine inspection one month later.

Approximately 80 per cent of the patients needed treatment for verrucae, in addition a careful search was made for structural or functional anomalies. In girls incipient hallux valgus was frequently seen; among other conditions observed were retracted toes producing metatarsal pain and deformities such as hammer toe and clawing. Abnormality of the great toe occurred frequently, the child usually complaining of pain in the region of the second metatarsal head, the underlying cause of which is shortness of the first metatarsal. An outstanding feature was the high percentage of pronated feet. Incorrect posture is often solely responsible for this condition, it was necessary to advise parents on the necessity of educating the child physically. In some cases the child was able to diminish voluntarily the degree of ankle valgus by assuming a correct stance.

Very few of the children complained of any foot trouble but 25 per cent of the total number treated had defects likely to cause disability in adult years. The patients and parents were co-operative, and took an intelligent interest in the treatment and advised after-care.

Many adult foot troubles originate in childhood, the underlying anomaly remaining undiagnosed or endured until pain is experienced. This extension of the School Health Service has steadily grown, and there is every reason to believe that the demand for its benefits will increase greatly. Work is carried out in congenial surroundings with the support of all the staff.

Infectious Diseases

Instructions are issued to Head Teachers of all schools in a "Vade Mecum concerning Infectious Diseases." No scholar or teacher shall attend school while suffering from any disease regarded as infectious or contagious. A teacher who suspects that any scholar in school is suffering from any infectious or contagious disease shall at once report to the Head Teacher who, if satisfied that there are reasonable grounds for suspicion, shall temporarily exclude from school the affected child or children, report the reason to the parent, and notify the exclusion to the School Medical Officer.

In all cases that warrant an enquiry a nurse is sent to the school to examine the children, take throat, nose or ear swabs of any suspected cases and take any other precautionary action that may be necessary, such as excluding children suspected of the disease, etc. By this method, in cases of diphtheria or scarlet fever, the cause of the spread of infection is very often found. In some cases the schools are visited by the Assistant School Medical Officers.

During the year increased activities were inaugurated against the spread of diphtheria and scarlet fever; arrangements were made whereby a daily list of children notified to the Medical Officer of Health to be suffering from these diseases be forwarded to the School Medical Department. Action is then taken as quoted above.

Notifiable infectious diseases are all reported to the Medical Officer of Health by Assistant School Medical Officers and Private Practitioners. All cases notified to the Medical Officer of Health are visited by the Health Visitors or Sanitary Inspectors, who give advice to parents and guardians of children respecting the care of the patient and the welfare of those in contact with the disease, and take steps, in cases necessary, for the removal of children to hospital. The Health Visitor also issues a notice excluding the patient and those in contact from attendance at school.

In cases visited by the Sanitary Inspectors on account of scarlet fever, or other fevers, exclusion notices are also issued by the Medical Officer of Health for children suffering, or children who may have been in contact with those suffering, from the disease.

Co-operation of Parents, Teachers, School Attendance Officers and Voluntary Bodies

The influence of the Head Teachers with the parents helps the attendance of children at the School Clinics for both medical and dental purposes, and the teachers' special knowledge of the children and their environment is very helpful to the nurses in "following-up."

There is as much co-operation as possible between the School Attendance Department and the School Medical Department in all cases of children requiring medical attention, securing the attendance of children at the School Clinics, assistance in following up cases, changes in addresses and schools of children, etc.

The help given by the Bradford Cinderella Club in providing children with a holiday at the Hest Bank Holiday Home, Morecambe, has been much appreciated. Each child has a medical examination prior to travelling.

The Victoria Convalescent Fund has also assisted the School Medical Service in helping cases referred to them by the School Medical Officers and also by sending children to Holiday and Convalescent Homes.

During the year many cases of neglected children have been brought to the notice of the Inspectors of the National Society for the Prevention of Cruelty to Children with beneficial results to the children concerned. The Inspectors have also visited cases where the parents have refused to obtain necessary medical attention prescribed by the School Medical Officers, a help which is very much appreciated.

Routine Medical Inspections

(*a*) Nutrition.—The nutrition of the children examined at the Routine Medical Inspections has been assessed in the three grades as follows:

Age Group	Number Inspected	A Good		B Fair		C Poor	
		No.	%	No.	%	No.	%
Entrants	4,475	1,518	33·9	2,884	64·5	73	1·6
Second Age Group . .	3,828	782	20·4	2,965	77·5	81	2·1
Third Age Group . .	299	84	28·1	212	70·9	3	1·0
Other Periodic Inspections	9,180	2,727	29·7	6,365	69·3	88	0·9
Total Prescribed Groups	17,782	5,111	28·7	12,426	69·9	245	1·4
Nursery Schools . .	1,324	396	29·9	910	68·7	18	1·4
Totals. . . .	19,106	5,507	28·8	13,336	69·8	263	1·4

(*b*) Uncleanliness.—Out of 19,106 children inspected 20 boys and 101 girls were found with uncleanliness of head (0·63 per cent), 12 boys and 10 girls with uncleanliness of body (0·11 per cent).

The following table records the findings of the School Medical Officers at the Routine Inspections:

Age Group	Number Inspected	Head				Body			
		Boys	Girls	Total	%	Boys	Girls	Total	%
Entrants	4,475	4	20	24	0·53	3	6	9	0·20
Second Age Group	3,828	5	31	36	0·94	5	2	7	0·18
Third Age Group . .	299	—	5	5	1·67	—	1	1	0·33
Other Periodic Inspections . .	9,180	6	29	35	0·38	3	—	3	0·03
Total Prescribed Groups	17,782	15	85	100	0·56	11	9	20	0·11
Nursery Schools . .	1,324	5	16	21	1·59	1	1	2	0·15
Totals . .	19,106	20	101	121	0·63	12	10	22	0·11

From Table III it will be noticed that 4,365 children were found unclean by the nurses at the cleanliness inspections in schools.

(*c*) Diseases of the Skin.—At the Routine Medical Inspections 905 children were found with skin diseases, 558 were referred for treatment and 347 required to be kept under observation.

At the Special Inspections 106 children were found requiring treatment.

It will be seen from Table IV that 5,828 defects were treated at the School Clinics.

(*d*) Visual Defects and External Eye Disease.—It will be seen from Table II that 1,082 children were found to require treatment for defective vision at the Routine Medical Inspections and 199 children to require treatment for squint.

At the Special Inspections 1,192 children were referred for treatment for defective vision and 14 for squint.

The total number of children referred for treatment on account of defective vision and squint was 2,487, and it will be noticed from Table IV, Group II, that 1,424 defects were dealt with. The former figure includes cases of repairs to spectacles and accounts for the difference between these two figures.

(*e*) Nose and Throat Defects.—At the Routine Medical Inspections 2,951 children were found to have nose and throat defects, of whom 1,132 were referred for treatment.

At the Special Inspections 180 children were found, of whom 176 were referred for treatment.

It will be noticed from Table IV, Group 3, that 2,416 children received operative treatment.

(*f*) Ear Disease and Hearing.—From the Routine Inspections 171 children were found to be suffering from ear disease or defective hearing, of whom 130 were referred for treatment and 41 were placed under observation.

At the Special Inspections 99 children were found, of whom 80 were referred for treatment and 13 were placed under observation (*g*) Dental Defects.—In addition to the inspections carried out by the School Dentists, the doctors make an examination of each child's mouth at the Routine Inspections. The number of children found with dental defects are shown in the following table:

	Numbers Inspected	Numbers with Dental Defects
Boys ..	8,999	764
Girls ..	8,883	962
Totals ..	17,882	1,726

(*h*) Orthopaedic and Postural Defects.—The number of children suffering from defects caused by rickets, spinal curvature and other deformities found at the Routine and Special Inspections are shown in the following table:

Defect	Routine Inspections Number of Defects Requiring Treatment	Routine Inspections Number of Defects For Observation	Special Inspections Number of Defects Requiring Treatment	Special Inspections Number of Defects For Observation
Posture	313	228	21	1
Flat Foot	672	96	19	1
Other	207	802	17	27

(*i*) Heart Disease.—At the Routine Inspections during the year 563 children were found to require treatment and 307 children were required to be kept under observation on account of heart disease and circulation.

There were also 99 children (excluding those at the Lister Lane School for Physically Handicapped Pupils) referred for treatment and 30 for observation from the Special Inspections.

(*j*) Other Defects and Diseases.—

(1) Enlarged Cervical Glands (Non-Tubercular).—At the Routine Inspections 295 children were found with enlarged cervical glands (non-tubercular). Of these 55 required treatment and 240 were kept under observation.

At the Special Inspections 15 children were found.

(2) Defective Speech.—At the Routine Inspections 105 children were found with defective speech. Of these 50 required treatment and 55 were kept under observation. At the Special Inspections 39 children were found, 27 of whom required treatment.

(3) Lungs.—At the Routine Inspections 445 children were found suffering from bronchitis and other non-tubercular lung diseases. Of these 278 required treatment and 167 were kept under observation.

At the Special Inspections 140 cases were found, 129 requiring treatment.

(4) Nervous System.—At the Routine Inspections 401 children were found with nervous conditions. Of these 273 required treatment and 128 were kept under observation. At the Special Inspections 20 cases were found. 14 of these required treatment and 6 were kept under observation.

(5) Miscellaneous.—At the Routine Inspections 351 children were found suffering from other defects and diseases. Of these 304 were referred for treatment and 47 were kept under observation.

At the Special Inspections 1310 cases were found, 1253 of these required treatment and 57 were kept under observation.

5. Following Up.—The number of defects discovered by the nurse in the schools was 11,096.

(*a*) Record of visits for 1950:

1.	Visits to Schools	873
2.	Children examined	85,965
3.	Individual pupils found to be infested	4,365
4.	Visits to homes	272

(*b*) Defects discovered:

1.	Uncleanliness (Head)	8,731	7.	Defective Vision	1,220
2.	Uncleanliness (Body)	366	8.	Squint	142
3.	Ringworm	5	9.	Running Ears	85
4.	Scabies	8	10.	Infectious Diseases	20
5.	Impetigo	117	11.	Other conditions	343
6.	Sore Eyes	59			

The School Health Service is responsible for 40,000 children of school age. Nursery school children between the ages of 2 and 5 are also included in the service.

Medical inspections are carried out at regular and frequent intervals and the full co-operation and presence of the parents is invited on these occasions. The School Medical Officer keeps a close watch on the child's physical and mental development throughout his school career, aided by close liaison with the Head Teacher. Facilities for examination and treatment are available at School Clinics situated in Manor Row, Edmund Street, Green Lane, Lapage Street and Spring Bank Place, but medicines and domiciliary treatment are not included. Clinic treatment is provided free for patients of school age suffering from skin, visual, hearing, postural, dental, speech, emotional and other defects; handicapped pupils are ascertained who need modified education in special schools.

Arrangements for Treatment:

(*a*)	Minor Ailments	School Clinics.
(*b*)	Tonsils and Adenoids (operations)	The Royal Eye and Ear Hospital.
(*c*)	Tuberculosis	Chest Clinic and Grassington Sanatorium.
(*d*)	Skin Disease	School Clinics, Royal Infirmary and St. Luke's Hospital.
(*e*)	External Eye Disease	School Clinics, Ophthalmic Clinic, Manor Row, and St. Luke's Hospital.
(*f*)	Vision	School Clinics, Ophthalmic Clinic, Manor Row.
(*g*)	Ear Disease and Hearing	School Clinics and The Royal Eye and Ear Hospital
(*h*)	Dental Defects	Central School Clinic.
(*i*)	Crippling Defects and Orthopaedics	Central Clinic, School for Handicapped Pupils, Lister Lane, and St. Luke's Hospital.

Attendances made by children at the School Clinics during the year 1950:

To see the Doctor	6,443
Minor Ailments	32,711
Eye Specialist	242
Speech Therapist	1,302
Chiropodist	396
Immunisation	352
Dental Treatment	9,027
Total	50,473

Number of children recommended admission to:

School for Physically Handicapped Pupils (Lister Lane)	64
School for Educationally Sub-normal Pupils (McMillan)	55
School for Deaf Pupils (Bolton Royd)	15
School for Partially Sighted Pupils (Daisy Hill)	18
Occupation Centre	8
Institutions	11

Physiotherapy Department, Central School Clinic

Children attended twice weekly during school hours and Saturday mornings. Whenever possible a new child is treated individually with the parent present and given home exercises, he later joins a small group of children for class work. Frequently treatments must be continued for long periods. As there is only one Physiotherapist, qualified gymnastic instructors help by teaching posture and foot exercises at the commencement of a gymnastic session. Correct footwear is always desirable, wearing pumps can neither correct nor support a flat foot. "Inneraze" shoes made by Startrite have been found helpful.

Asthma is one of the most difficult problems, its amelioration calls for much patience and perseverance from patient, parent and physiotherapist. Most of the children treated have been between 5–10 years of age. When taught relaxation, correct diaphragmatic breathing and general exercises, the children have improved considerably in health and spirits.

214 children were referred by School Medical Officers and eight by private practitioners.

75 children came from Grammar Schools.
48 children from Modern Schools.
73 children from Primary Schools.
6 children from Nursery Schools.

Attendances:		
	Girls ..	2,703
	Boys ..	1,514
	Total ..	4,217

92 children were discharged cured.
31 children were discharged improved.
12 children did not complete their treatment.
4 children left school before treatment was completed.
6 children were referred for hospital treatment.
77 children were carried forward to 1951.

Classification of cases:

Kyphosis	80
Scoliosis	8
Foot Deformities	101
Asthma	17
Recent injuries	8
Post-tonsillectomy	5
Rickets	3
Total	222

Ultra Violet Rays

Ultra Violet Ray treatment was given at the Central School Clinic. During the year 614 children received this treatment, 413 cases were completed; 74 cases for various reasons failed to complete the course and 127 cases were carried forward to 1951.

The children made 7,954 attendances for treatment.

A short dose is given at the first attendance, and this is increased gradually to a maximum of five minutes.

Owing to the discontinuation of the manufacture of the type of burner necessary for the lamps in use for many years a new "Centrosol" Ultra Violet Ray lamp was installed on September 22nd, 1950. This lamp enables a larger number of children to be treated at the same time.

CASES TREATED BY ARTIFICIAL SUNLIGHT, 1950

Defect	Number of Children	Average Number of weeks	Minimum Number of weeks	Maximum Number of weeks	Number of Exposures					Signs of Improvement						Result of Treatment		
					Minutes													
					1	2	3	4	5	Temperament	Energy	Sleep	Nutrition	Hemoglobin	Condition cleared	Much improved	Slightly improved	No change
Anaemia	87	10·3	7·0	13·5	93	93	96	99	1418	17	74	51	45	87	48	35	4	—
Asthma	19	10·2	7·5	11·5	20	19	22	21	306	6	13	9	10	18	5	11	2	1
Anorexia	22	10·2	6·5	11·5	23	23	24	26	352	7	17	14	13	22	17	4	1	—
Bronchitis	16	10·3	9·0	12·0	17	17	20	19	257	1	10	8	5	16	5	11	—	—
Bronchial Catarrh ..	64	10·1	6·0	11·0	65	67	70	66	1030	17	51	42	35	64	30	32	2	—
Cervical Adenitis ..	9	10·4	9·0	12·0	9	9	9	9	152	1	7	4	3	9	6	2	1	
Chorea	1	9·0	—	—	1	1	1	1	14	—	1	1	—	1	1	—	—	—
Debility	52	10·2	5·5	13·5	52	52	56	52	848	12	47	34	21	52	38	10	4	—
Malnutrition	5	9·2	6·0	11·0	5	4	5	5	73	2	3	2	2	4	3	1	1	—
Nasal Catarrh ..	12	9·8	7·5	11·0	12	13	13	14	183	3	7	7	6	9	4	8	—	—
Rheumatism	7	10·3	9·0	11·0	7	7	7	7	116	—	6	1	4	7	4	3	—	—
Skin Diseases	4	10·2	9·5	11·0	4	4	4	3	67	—	3	2	2	4	3	1	—	—
Other Defects ..	115	9·8	5·5	12·0	119	114	135	127	1774	30	88	60	48	115	65	45	5	—

CASES WHO RECEIVED ARTIFICIAL SUNLIGHT, BUT FAILED TO COMPLETE COURSE

Defect	Number of Children	Minimum Number of Weeks	Maximum Number of Weeks	Average Number of Weeks	Number of Exposures					Reason for Discontinuing Treatment						
					Minutes											
					1	2	3	4	5	Defaulted	Admitted to Hospital	Left the city	Parents declined treatment	Parents unable to accompany child	Advised to discontinue treatment	Referred to own Doctor
Anaemia	11	2·0	7·5	4·5	12	12	11	10	55	9	1	1	—	—	—	—
Anorexia	2	2·5	3·0	2·8	2	2	2	2	3	2	—	—	—	—	—	—
Asthma	4	2·0	3·5	2·4	3	3	3	2	8	2	1	—	—	1	—	—
Bronchitis	6	2·0	6·0	3·8	6	6	6	5	22	6	—	—	—	—	—	—
Bronchial Catarrh ..	9	2·0	8·0	5·5	9	9	9	10	62	8	—	—	1	—	—	—
Debility	8	3·0	6·0	4·5	8	8	8	7	41	7	—	—	—	—	1	—
Malnutrition	2	5·0	6·5	5·7	2	2	2	2	15	2	—	—	—	—	—	—
Nasal Catarrh ..	1	—	—	5·5	1	—	1	1	8	1	—	—	—	—	—	—
Overstrain	2	2·5	2·5	2·5	2	2	2	2	2	2	—	—	—	—	—	—
Rheumatism	1	—	—	3·5	1	1	1	1	3	—	—	—	—	—	—	1
Skin Disease	3	3·5	4·5	4·2	3	3	3	3	13	2	—	—	—	—	—	1
Other Defects ..	25	1·5	7·0	3·8	26	25	29	22	86	22	—	2	—	—	—	1

Handicapped Pupils

(*a*) The methods adopted for ascertaining and dealing with handicapped pupils.

The majority of cases are found during the Routine Inspections in the schools and the Special Inspections at the School Clinics. Others are referred by Head Teachers and School Attendance Officers. Many of the cripples are found by the Orthopaedic Surgeon at St. Luke's Hospital. Whenever a case is found, or referred, a special appointment is made for the child to be medically examined at the Central School Clinic by the Senior Assistant School Medical Officer, who makes all recommendations to the Local Education Authority for admission to the various Special Schools in the City.

(*b*) All Educationally Sub-normal children of school age, whether in attendance at Special Schools or not, are placed under the supervision of the Council of Social Service, whose visitation continues until the children concerned leave the Special School on reaching the legal leaving age of 16 years, or, as occurs in some few cases, until they are certified by the School Medical Officer to be incapable of receiving further benefit there. In both instances, under Section 57 (3) of the Education Act, 1944, the children are notified to the Local Authority, which has employees undertaking the visitation of such persons at regular intervals, and the reports of these visitors are presented to the Committee not less than twice a year. These children also attend the School Clinic, at periods named by the Certifying Officer, for re-examination, or are visited at their homes by the Medical Officer.

In the case of Physically Handicapped children, they are similarly visited during the course of their school life, and if any of the children are reported by the School Medical Officer to be fit to attend an ordinary school, they are visited for two years whilst in attendance at such school. Children who leave between the ages of 14 and 16 years are visited afterwards.

The Education Committee arrange for the vocational training of Blind Persons over 16 years of age. When these children leave the special schools they are visited and kept under the supervision of the Council of Social Service.

The Margaret McMillan Day School for Educationally Subnormal Children

This special school provided a simplified practical curriculum for selected children permanently unable to derive proper benefit at ordinary schools. The number on roll increased from 171 in January to 193 in December; of the three children who left at Easter, 13 at midsummer and ten at Christmas, most were employable at manual tasks.

The new playground was completed and officially opened during July. The usual social events, sports, open day, bonfire, concert and parties were enjoyed to the full by these non-sophisticated pupils; their display at the Inter-Schools Gardening Exhibition again won distinction.

Lister Lane School for Physically Handicapped Pupils

This is a special school for children who are so incapacitated, principally on account of deformity or cardiac disease, that they are unable to benefit from education in an ordinary school.

Four motor ambulances are provided for the conveyance of children unable to travel by the ordinary means of transport. Special chairs and couches are available in the class-rooms.

The school is designed on open-air lines with ample window space and playing grounds. The main block is orientated to get the maximum amount ot sun. The children stay all day at school, their dinners being sent from a Cooking Depot. The children rest for an hour on canvas stretchers after their dinners.

Accommodation for Nursery children (2 to 5 years) was provided during 1930 in order that crippled children might have early treatment and training. This has resulted in the transference of many cases to ordinary schools within a few years. Other children stay until 16 years of age.

The Medical Staff consists of a Nurse and two Masseuses, who are employed whole-time, the Medical Officer, who visits one half-day a week, and a Consulting Orthopaedic Surgeon who visits one half-day fortnightly. Massage, remedial exercises, baths, electricity and sun-ray lamp form part of the routine treatment. The Orthopaedic Surgeon operates on selected cases at St. Luke's Hospital.

The 178 children on roll suffered mainly from infantile paralysis, cerebral palsy, surgical tuberculosis, osteomyelitis and cardiac diseases. Epileptic and incontinent spina bifida cases again presented difficult problems. Following treatment twenty pupils were fit for transfer to ordinary schools; five were able to start gainful employment at fifteen years of age. The orthopaedic surgeons held 333 consultations on 26 visits, and by operations in hospital enabled eleven scholars to walk unaided.

In this specially equipped school while the children's defective bodies are being skilfully nurtured their minds assimilate the principle that the essential thing in life is not in conquering but in fighting well. All pupils participated in various field sports, freedom in play was an enjoyable means to all-important self-confidence. Senior pupils were carefully prepared for selected employment, their general knowledge was enlarged by social studies and by visits to the Telephone Exchange, Post Office Sorting Department, Sewage Works, etc. Individual distinctions included entrance to a Grammar School, an Art prize of 30/- and a first-class award in a national knitting contest.

Miss Cribb, one of our two physiotherapists, was seconded during May and June to the Cerebral Palsy Unit of Queen Mary's Hospital at Carshalton. The technique there is based on work by Dr. Phelps of Baltimore; patients aged four months to five years, whether spastic, athetoid or atixic, are taught to acquire balance in the sitting position and later in the kneeling position, before they are permitted to attempt walking. It is fundamental that the actual muscles of cerebral palsied patients may be normal though the mind. picture of how to perform co-ordinated actions is incomplete; once this view is accepted then real improvement can be effected by careful repetition of basic movements and patient encouragement. Such a regime, requiring very early ascertainment and sustained treatment by an expert team in a residential school, could be provided by a Regional Hospital Board or by the combined efforts of several Educational Authorities.

There was a Special Enquiry into provisions made for all Physically Handicapped Pupils aged 2 to 16 years. The findings are listed below:

TABLE I

Number of Children ages 5–16 years

Defects	(1) At Ordinary Schools		(2) At Day Special Schools		(3) At Residential Special Schools including Hospital Schools		(4) At home: Having Home Teaching		(4) At home: Not having Home Teaching		Totals		
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	T.
Congenital Heart ..	7	7	11	18	—	—	—	—	—	—	18	25	43
Rheumatic Heart ..	7	9	2	2	—	—	—	—	—	—	9	11	20
Haemophilia	—	—	2	—	—	—	—	—	—	—	2	—	2
Cerebral Palsy (including athetosis) ..	—	7	15	9	—	—	—	—	—	—	15	16	31
Poliomyelitis	4	2	6	11	—	—	—	—	—	3	10	16	26
Muscular Dystrophy ..	1	—	1	—	—	—	—	—	—	—	2	—	2
Spina bifida	1	—	3	2	—	—	—	—	2	2	6	4	10
Osteomyelitis	1	—	—	2	—	—	—	—	—	—	1	2	3
Hydrocephalus	—	—	—	1	—	—	—	—	—	—	—	1	1
Fragilitis Ossium ..	—	—	1	—	—	—	—	—	—	—	1	—	1
Achondroplasia.. ..	—	—	—	1	—	—	—	—	—	—	—	1	1
Arthrogryphosis ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Perthe's Disease ..	4	2	4	—	—	—	—	—	—	—	8	2	10
Tb. Joints	6	3	10	3	2	2	—	—	—	—	18	8	26
Talipes	12	7	6	2	—	—	—	—	—	—	18	9	27
Cong. Dislocation Hips	—	—	1	—	—	—	—	—	—	—	1	—	1
Cong. Deformities—													
(*a*) Arms and hands	—	2	1	1	—	—	—	—	—	—	1	3	4
(*b*) Legs and feet ..	3	—	1	—	—	—	—	—	—	—	4	—	4
Amputations—													
(*a*) Legs	—	—	2	1	—	—	—	—	—		2	1	3
(*b*) Arms	—	—	1	2	—	—	—	—	—	—	1	2	3
Rheumatoid Arthritis (includ. Still's Dis.)..	—	—	—	—	—	—	—	—	—	1	—	1	1
Septic Arthritis.. ..	—	—	4	—	—	—	—	—	—	—	4	—	4
Fractured Skull ..	—	—	1	—	—	—	—	—	—	—	1	—	1
Brain Tumour	—	—	—	—	—	—	—	—	—	—	—	—	—
Friedrich's Ataxia ..	2	—	—	—	—	—	—	—	—	—	2	—	2
Others (specify)* ..	18	18	11	18	—	—	—	—	1	1	30	37	67
Totals.. ..	66	57	83	73	2	2	—	—	3	7	154	139	293

TABLE I *Details of Other Defects*

Defects	(1) At Ordinary Schools		(2) At Day Special Schools		(3) At Residential Special Schools including Hospital Schools		(4) At Home: Having Home Teaching		(4) At Home: Not having Home Teaching		Totals		
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	T.
Congenital deformities	—	—	—	1	—	—	—	—	1	—	1	1	2
Acrodynia	—	—	1	—	—	—	—	—	—	—	1	—	1
Epilepsy..	7	4	1	3	—	—	—	—	—	—	8	7	15
Coeliac Disease.. ..	1	—	—	—	—	—	—	—	—	—	1	—	1
Glandular Defect ..	—	—	1	—	—	—	—	—	—	—	1	—	1
Rickets, etc.	8	10	—	4	—	—	—	—	—	1	8	15	23
Respiratory Defects ..	—	—	7	3	—	—	—	—	—	—	7	3	10
Post accident	—	—	—	1	—	—	—	—	—	—	—	1	1
Pernicious Anaemia ..	—	—	—	1	—	—	—	—	—	—	—	1	1
Rheumatism, etc. ..	1	3	1	5	—	—	—	—	—	—	2	8	10
Renal Tuberculosis ..	1	1	—	—	—	—	—	—	—	—	1	1	2
Totals.. ..	18	18	11	18	—	—	—	—	1	1	30	37	67

TABLE II

Defects	Number of Children ages 2–4 11/12 years												
	(1) At Ordinary Schools		(2) At Day Special Schools		(3) At Residential Special Schools including Hospital Schools		Having Home Teaching		Not having Home Teaching		Totals		
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	T.
Congenital Heart . .	—	—	—	—	—	—	—	—	2	1	2	1	3
Rheumatic Heart . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Haemophilia	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebral Palsy (including athetosis)	—	—	1	—	—	1	—	—	—	1	1	2	3
Poliomyelitis	—	—	—	2	—	—	—	—	—	—	—	2	2
Muscular Dystrophy . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Muscular Atrophy . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Spina Bifida	—	—	1	—	—	—	—	—	—	—	1	—	1
Osteomyelitis	—	—	—	2	—	—	—	—	—	—	—	2	2
Hydrocephalus	—	—	—	—	—	—	—	—	1	—	1	—	1
Fragilitas Ossium . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Achondroplasia	—	—	—	—	—	—	—	—	—	—	—	—	—
Arthrogryphosis . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Perthe's Disease . .	—	—	—	—	—	—	—	—	1	—	1	—	1
Tb. joints	—	—	—	—	—	—	—	—	—	—	—	—	—
Talipes	—	—	1	—	—	—	—	—	—	1	1	1	2
Cong. Dislocation Hips	—	—	1	1	—	—	—	—	—	—	1	1	2
Cong. Deformities—													
(*a*) Arms and hands . .	—	—	—	—	—	1	—	—	—	—	—	1	1
(*b*) Legs and feet . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Amputations—													
(*a*) Legs	—	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Arms	—	—	—	—	—	—	—	—	—	—	—	—	—
Rheumatoid Arthritis (includ. Still's Disease)	—	—	—	—	—	—	—	—	—	—	—	—	—
Septic Arthritis	—	—	—	—	—	—	—	—	—	—	—	—	—
Fractured Skull . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Brain Tumour	—	—	—	—	—	—	—	—	—	—	—	—	—
Friedrich's Ataxia . .	—	—	—	—	—	—	—	—	—	—	—	—	—
Others (Epilepsy) . .	—	—	1	—	—	—	—	—	2	1	3	1	4
Totals	—	—	5	5	—	2	—	—	6	4	11	11	22

TABLE II *No. of P.H. children at home, or at ordinary schools, who are waiting admission to:*

(1) Day P.H. Schools		(2) Residential P.H. Schools (*a*) For seriously crippled children e.g., Hinwick Hall		(*b*) For less seriously crippled children e.g., Victoria Home, Bournemouth		Totals		
Boys	Girls	Boys	Girls	Boys	Girls	B.	G.	T.
4	4	2	1	—	2	6	7	13

TABLE III

	Boys	Girls	Total
No. of seriously P.H. children for whom home teaching is the best provision. (Excluding those who are waiting admission to special schools)	—	—	—

TABLE IV

	Boys	Girls	Total
Number of P.H. children in bed at home	2	2	4

TABLE V

		Already in Residential P.H. Schools		Waiting admission to Residential Schools		For whom home teaching is best provision		Totals		
		Boys	Girls	Boys	Girls	Boys	Girls	B.	G.	T.
How many have incontinence of	1. Bladder ..	—	—	—	—	—	—	—	—	—
	2. Bowel ..	—	—	—	—	—	—	—	—	—
	3. Both.. ..	—	—	1*	—	—	—	1	—	1
How many are chair cases	1. Self-propelled	—	—	—	—	—	—	—	—	—
	2. Push chairs..	—	—	—	—	—	—	—	—	—
How many with crutches or two sticks		—	—	—	—	—	—	—	—	—
How many are—										
P.H. and E.S.N.		—	—	—	—	—	—	—	—	—
P.H. and Epileptic		—	—	—	—	—	—	—	—	—
P.H. and Maladjusted.. ..		—	—	—	—	—	—	—	—	—
P.H. and Blind..		—	—	—	—	—	—	—	—	—
P.H. and Partly Sighted ..		—	—	—	—	—	—	—	—	—
P.H. and Deaf		—	—	—	—	—	—	—	—	—
P.H. and Partly Deaf		—	—	—	—	—	—	—	—	—
P.H. and more than one other defect		—	—	—	—	—	—	—	—	—

* Spina bifida—in day Special School as temporary expedient awaiting Residential Special School.

Daisy Hill Partially Sighted School

The school work continued satisfactorily, teachers strove to reach the standard of the ordinary schools. Young pupils were encouraged to work on upright boards but older children were given freedom of choice, and many preferred the normal position.

Weaving and printing were introduced as handwork for the top class. In order to inculcate responsibility the two senior classes have been called upon to conduct morning assembly and also to act as table heads during mid-day meals.

The artificial illumination was found quite inadequate during severe fog, it being improved in accordance with the lighting regulations.

Mr. Benson began monthly visits as Consultant Oculist in January 1950. He examined all pupils within the year, and commented that the educational methods are beneficial to the pupils' eyes; that there wasn't a single defect due to ophthalmia neonatorum found either at the Special School or at the Central Clinic; and that there is an actual increase of squint cases needing hospital treatment throughout the country.

	Boys	Girls	Total
Children on roll January 1950 ..	44	58	102
Children admitted during 1950 ..	8	10	18
Children discharged during 1950 ..	12	16	28
Children on roll December 1950 ..	40	52	92

Twelve boys were discharged of whom:

1 obtained a scholarship to Belle Vue Grammar School;

2 left Bradford;

9 entered full-time employment.

Sixteen girls were discharged:

1 transferred to Halifax Technical School;

1 left Bradford;

4 returned to ordinary schools;

10 entered full-time employment.

Bolton Royd School for the Deaf

The school had 69 children on roll; 32 were totally or severely deaf and 37 were partially deaf. During the year the number on roll increased to 78, then owing to lack of accommodation a waiting list accrued. The increase in numbers was mainly due to the formation of a Nursery Class under five years of age. This group of 11 children had to be accommodated in the former staff room. In view of the outstanding benefit these very young deaf children are deriving from their early training in lip-reading and speech production, it is greatly regretted that all deaf children of nursery age cannot be given the opportunity to attend.

One of the most important developments was the provision of individual Medresco hearing aids for all children capable of using them. Every scholar attended the Royal Eye and Ear Hospital, at specially arranged sessions, when each child was examined by the Aural Surgeon and then had its hearing tested by technicians. Aids were supplied to all children with any useful hearing—however limited; 51 children now possess individual aids which they use in school almost continually. The aids are stored at night to prevent damage during travelling, but children are encouraged to take them home whenever there is any special need such as scout meetings, Sunday School concerts, etc.

Speech has been markedly improved in tone and rhythm by this continual aural stimulation. Partially-deaf children were able to develop more normally, their response became more alert and better sustained. Replacement batteries were issued at school through the ready co-operation of the Hospital staff, repairs were carried out with minimum inconvenience.

Social activities included a Swimming Gala, a Sports Day, and a visit to York.

The growing numbers necessitated the engagement of another teacher, and a graduate of Leeds University was appointed in September.

There has been continued co-operation between school and home. he Parents' Association had a very successful season.

Joan Godfrey, the ex-Bolton Royd girl attending the Mary Hare rammar School for the Deaf, was awarded the prize given to the year's ost outstanding pupil.

Linton Residential Open Air School

The School accommodated an average number of 178 children uring the year; 156 were admitted following recommendations by chool Medical Officers and Child Guidance personnel and 181 ft. Many withdrawals due to lapsed payment by parents may be ttributed to the high cost of living. Ages range from six to fifteen ears, entrants under nine have been accepted only in special ircumstances.

At this recovery school lessons were arranged in eight classes during ng morning and short evening sessions; afternoons were devoted to utside interests and social training. Informal activities included indoor nd field games, dramatic productions, swimming, country walks and xpeditions to places of interest. The best antidote to homesickness as a system of family-like groups whereby each member of staff kept lose contact with a small number of assorted children for free condences, joys and sorrows, birthday celebrations and for that inherent eed of unrepressed belonging to a respected adult. In a camp where any of the pupils had been maladjusted in their previous environents, thirty-four had come from broken homes and sixty were orphans, he need of unobtrusive welfare work is unlimited; the creation of a ree atmosphere becomes worth-while when unpromising proteges anifest consideration to others and find happiness in community ervice.

There are two dormitories for girls and two for boys; enuretics who id not improve after prolonged individual treatment returned home.

At the September medical inspection the following cases were in residence:

Alopecia..	1
Adenitis	6
Anaemia..	40
Anorexia	5
Asthma ..	16
Chorea ..	2
Convalescent following illnesses	43
Heart condition	1
Laryngitis	1
Malnutrition	1
Post operation ..	2
Post Sanatorium	2
Retarded growth	3
Rheumatism	2

Medical treatment was provided by Dr. Wynn of Addingham who visited regularly, and also attended immediately whenever requested by telephone.

The success of this major social undertaking would be greatly helped if Linton were recognised as a Special School.

Speech Therapy

The total number of children treated by Miss Ayrton was 92, attendances aggregated 1,298, 10 cases were discharged cured; of the 57 cases referred from all sources during the year 40 started courses of treatment. Several pre-school children were gladly accepted so that speech disorders might be corrected before faulty habits were firmly established; it is hoped that a play-therapy room can be provided to further the improvement of these young clients.

Defects fell into three main groups:

1. Disorders of articulation: some had various complications, e.g., high frequency deafness, reading defect, low intelligence.
2. Stammering.
3. Impaired resonance, malformations.

Assistance was obtained when necessary from other departments, such as Ear, Nose and Throat Hospital, Dental, Physiotherapy and Child Guidance.

Whenever the speech therapist visited the schools she was helped by the willing co-operation of the teachers. The results of treatment have been satisfactory, especially where regular attendance was assisted by parental interest.

Child Guidance

The Child Guidance Clinic, which had moved in 1948 from Manor Row to more spacious premises at Spring Bank Place, developed its mental health activities. Miss M. Hamilton, our enthusiastic Psychiatric Social Worker for many years, resigned in September 1950; we are grateful for her indefatigable pioneering and warmly wish her every success in a wider field of influence at Manchester University.

The total number of new cases referred from various sources was 180, these were classified according to presenting symptoms as follows:

Retardation	54
Nervous Disorders	21
Aggressive behaviour	22
Stealing	16
Anti-social evasive behaviour	29
Fears and anxieties	15
Habit disorders	20
High School failures	2
Miscellaneous	1
Total	180

Though preventive work is naturally directed towards the young, Dr. H. Edelston, D.P.M., has been concerned that psychiatric treatment should become available also to disturbed parents; he looks forward to an organisation, like the London Tavistock Clinic, which might be established jointly by the Local Authority and the Regional Hospital Board.

Juvenile delinquents fell into two main groups: (a) children with an inherent lack of conscience and no depth of feeling; these needed prolonged periods of special training such as is provided at Home Office Approved Schools. (b) children tempted by unwholesome environment; many of the latter milder cases responded well to adequate residence at Linton.

The total number of cases under C.G.C. treatment during 1950 was 96; of the 52 whose treatment was completed within the year 42 improved, 3 did not improve and 7 lapsed. Following detailed investigation of each case separately, treatment was conducted almost entirely on group lines, part from those adolescents who required individual methods.

Mrs. B. Brook, B.A., was appointed full-time Educational Psychologist in September 1949. In addition to extensive mental testing and spending four sessions per week in schools she gave remedial teaching to two distinct groups: (a) Children of average intelligence but suffering from a specific disability, e.g., spelling or number. Most of these cases require six months in a Tutorial Class, some also need remedial teaching and play-therapy at the Clinic; (b) children with inferior intelligence; they should be removed from the competitive conditions of ordinary schools.

There is an urgent need of many properly staffed Tutorial Classes.

Dental Report

By Mr. H. Morrell

When the National Health Service was inaugurated one hoped that expectant and nursing mothers and young children would be given the highest priority in dental treatment, and the School Dental Service would be improved and extended. The reverse has happened due to the drift of dental officers from the School Health Service; the excellent dental services which progressive authorities were gradually establishing for the conservation of children's teeth is breaking down.

The gateway of the alimentary system has the very important function of preparing the food for digestion by the processes of chewing and mixing it with saliva. The health of the whole body depends to an appreciable extent upon the state of the mouth and jaws and their proper use. Experience shows that an unhealthy mouth or one that is insufficiently used for its special purposes has sooner or later an injurious effect. Much more could be achieved by promoting the mouth's development and maintenance in good condition.

The year was a most difficult one for the remaining two School Dental Officers in Bradford. When faced with tremendous difficulties they were given inadequate help in the surgeries. Nevertheless they endeavoured to do the greatest good for the greatest number of the 40,000 school children. As can be expected with such a large population but no dental hospital, most of their time was devoted to emergency treatment. It is gratifying that every case presented at the Dental Clinic was given immediate treatment for the relief of pain and oral sepsis.

Certain routine inspections were carried out in the schools by the Dental Officers; immediate appointments were made for treatment when the condition of the teeth was prejudicing health.

During the year under review the following inspections have been completed:

(*a*) Periodic Age Groups ..	4,447
(*b*) Specials	6,186

The total number of children inspected was 10,633. Of these 7,598 were found to require treatment, 6,598 actually received treatment at the Clinic and made 9,027 attendances for this purpose.

A brief summary shows that 246 fillings were completed, 3,058 permanent teeth extracted and 10,345 temporary teeth extracted. Other operations which include a variety of conditions numbered 86.

An anaesthetic is always used for the extraction of teeth, nitrous oxide being administered 7,472 times. The remaining extractions were ompleted under local anaesthesia. It was interesting to note the number of very young children attending the Clinic accompanied by their athers; many of these patients had just commenced school and were brought by their parents as a normal procedure.

Mr. Shoesmith's services as an anaesthetist were much appreciated, also his invaluable help in the treatment of certain orthodontic cases ndertaken at his own Clinic (within the Maternity and Child Welfare Department).

In addition to the number of irregularities treated by extraction, nine orthodontic plates have been fitted; the treatment in every case has been satisfactory with a marked improvement in the appearance of the children.

It is pleasing to record that local practitioners have been most helpful in our difficulties; close contact is maintained with them through the Local Executive Council.

Medical Inspection Returns

TABLE I

Medical Inspection of Pupils Attending Maintained Primary and Secondary Schools (including Special Schools).

A. *Periodic Medical Inspections*

Number of Inspections in the prescribed Groups:

Entrants	4,475
Second Age Group	3,828
Third Age Group	299
Total	8,602
Number of other periodic inspections..	9,180
Grand Total ..	17,782

B. *Other Inspections*

Number of Inspections in the prescribed Groups:

Number of Special Inspections	2,530
Number of re-inspections ..	3,913
Total	6,443

C. *Pupils found to require Treatment*

Number of individual pupils found at Periodic Medical Inspections to require treatment (excluding dental diseases and infestation with vermin).

TABLE II

Group	For defective vision (excluding squint)	For any of the other conditions recorded in Table IIA	Total Individual Pupils
Entrants	8	1,279	1,282
Second Age Group	341	721	1,003
Third Age Group	43	89	121
Total (prescribed groups) . .	392	2,089	2,406
Other Periodic Inspections . .	690	2,206	2,706
Grand Total	1,082	4,295	5,112

A. Return of Defects found by Medical Inspection in the Year ended 31st December, 1951.

Defect Code No.	Defect or Disease	Periodic Inspections		Special Inspections	
		No. of Defects		No. of Defects	
		Requiring Treatment	Requiring to be kept under observation but not requiring treatment	Requiring Treatment	Requiring to be kept under observation but not requiring treatment
4	Skin	558	347	106	—
5	Eyes: (*a*) Vision	1,082	1,228	1,192	485
	(*b*) Squint	199	218	14	1
	(*c*) Other	148	72	51	3
6	Ears: (*a*) Hearing	68	63	5	6
	(*b*) Otitis Media . .	48	8	17	—
	(*c*) Other	82	33	64	7
7	Nose or Throat	1,132	1,819	176	4
8	Speech	50	55	27	12
9	Cervical Glands	55	240	15	—
10	Heart and Circulation . .	563	307	99	30
11	Lungs	278	167	129	11
12	Developmental:				
	(*a*) Hernia	7	11	—	—
	(*b*) Other	141	77	—	—
13	Orthopaedic:				
	(*a*) Posture	313	288	21	1
	(*b*) Flat foot	672	96	19	1
	(*c*) Other	207	802	17	27
14	Nervous System:				
	(*a*) Epilepsy	6	9	—	3
	(*b*) Other	267	119	14	3
15	Psychological:				
	(*a*) Development . .	17	28	2	70
	(*b*) Stability	5	17	—	—
16	Other	304	47	1,253	57

B. Classification of the General Condition of Pupils Inspected during the year in the Age Groups.

Age Groups	Number of Pupils Inspected	A. (Good) No.	A. (Good) %	B. (Fair) No.	B. (Fair) %	C. (Poor) No.	C. (Poor) %
Entrants	4,475	1,518	33·9	2,884	64·5	73	1·6
Second Age Group	3,828	782	20·4	2,965	77·5	81	2·1
Third Age Group	299	84	28·1	212	70·9	3	1·0
Other Periodic Inspections	9,180	2,727	29·7	6,365	69·3	88	0·9
Total	17,782	5,111	28·7	12,426	69·9	245	1·4

TABLE III

Infestation with Vermin

i. Total number of examinations in the schools by the school nurses or other authorised persons	85,965
ii. Total number of individual pupils found to be infested	4,365
iii. Number of individual pupils in respect of whom cleansing notices were issued. (Section 54 (2), Education Act, 1944.)	—
iv. Number of individual pupils in respect of whom cleansing orders were issued. (Section 54 (3), Education Act, 1944.)	—

TABLE A

Treatment of Pupils attending Maintained Primary and Secondary Schools (including Special Schools).

GROUP I *Diseases of the Skin (excluding uncleanliness)*

	Number of cases treated or under treatment during the year: By the Authority	Otherwise
Ringworm: i. Scalp	7	—
ii. Body	7	—
Scabies	9	—
Impetigo	92	—
Other skin diseases	165	—
Total	280	—

GROUP II *Eye Diseases, Defective Vision and Squint*

	Number of cases dealt with: By the Authority	Otherwise
External and other, excluding errors of refraction (including squint)	275	10
Errors of refraction (including squint)	1,224	200
Total	1,499	210
Number of pupils for whom spectacles were:		
(*a*) Prescribed	976	120
(*b*) Obtained	856	95

GROUP III *Diseases and Defects of Ear, Nose and Throat*

	Number of cases treated	
	By the Authority	Otherwise
Received operative treatment:		
(*a*) For diseases of the ear	—	94
(*b*) For adenoids and chronic tonsillitis . .	—	2,190
(*c*) For other nose and throat conditions . .	—	132
Received other forms of treatment	395	—
Total	395	2,416

GROUP IV *Orthopaedic and Postural Defects*

(*a*) Number treated as in-patients in hospitals 30

	By the Authority	Otherwise
(*b*) Number treated otherwise, e.g., in clinics or out-patient departments	124	—

GROUP V *Child Guidance Treatment and Speech Therapy*

	Number of cases treated	
	By the Authority	Otherwise
Pupils treated:		
(*a*) Under Child Guidance arrangements . .	157	—
(*b*) Under Speech Therapy arrangements . .	89	—

GROUP VI *Other treatment given*

	Number of cases treated	
	By the Authority	Otherwise
(*a*) Miscellaneous minor ailments	4,014	—
(*b*) Other:		
1. Heart and Circulation	86	—
2. Lungs	120	—
3. Cervical Glands	19	—
4. Nervous System	40	—
5. Other Defects and Diseases . .	874	—
Total	5,153	—

TABLE B

Dental Inspection and Treatment carried out by the Authority

1.	Number of pupils inspected by the Authority's Dental Officers:		
		(*a*) Periodic Age Groups	4,447
		(*b*) Specials	6,186
		Total	10,633
2.	Number found to require treatment		7,598
3.	Number referred for treatment		7,598
4.	Number actually treated		6,598
5.	Attendances made by pupils for treatment		9,027
6.	Half-days devoted to:	Inspection	41
		Treatment	903
		Total	944
7.	Fillings:	Permanent Teeth	246
		Temporary Teeth	—
		Total	246
8.	Number of teeth filled:	Permanent Teeth	246
		Temporary Teeth	—
		Total	246
9.	Extractions:	Permanent Teeth	3,058
		Temporary Teeth	10,345
		Total	13,403
10.	Administration of general anaesthetics for extraction		7,472
11.	Other operations:	Permanent Teeth	85
		Temporary Teeth	1
			86

School Meals Service

During the year 167 voluntary and council schools have been visite for the purpose of supervising the cleanliness and method of handlin of meals and milk provided. Considerable variation was found in th use of this service by scholars. In some schools almost all partake o the school milk, whilst at one school only 34 out of 330 scholars avai themselves of this service. 165 of the 167 schools provide meals, the only exceptions being Esholt Church of England School and St. Andrew's Church of England School at Woodlands. Meals are also provided at 25 Nursery Schools.

The meals are prepared in 31 kitchens situated in various parts of the city and they are conveyed to the schools in special jacketed containers which make it possible for the meals to be delivered hot and in good condition. Examinations have been made of the methods used in the kitchens and all the containers used for transporting the food are frequently inspected to ensure that all the hygienic requirements are being observed. 276 visits to the kitchens and dining rooms have been made and while certain deficiencies have been observed, generally speaking, the Schools Meals Service is carried on in a highly efficient manner.

It must be pointed out that the provision of a school meals service is a considerable undertaking, and 18 males and 543 females are employed; of these 365 are employed on a part time basis. 64,290 meals are prepared and served weekly.

Report of the Inspector of Physical Education for the year 1950

F. J. C. MARSHALL

In view of the somewhat critical and comprehensive review of physical educational work in the Schools of Bradford which was given for the year 1949, only a brief and general survey is submitted this year.

General all-round progress is being maintained and the Teachers, judged by their attendance at the Demonstration Classes which have been held, are showing a very commendable interest in the newer methods and techniques. This is reflected in the general response of the pupils and in the obvious enjoyment and benefit they are obtaining from their lessons. The whole year can be said to have been a year of experimentation and the results seem to justify the new approach.

Progress in Swimming still continues; over 296,000 attendances being made during the year. This is the highest number ever recorded. Over 5,000 of the Committee's certificates were awarded. This is ample evidence that the policy of teaching as many children as possible how to swim is being carried out.

In spite of the expert attention given to the Playing Fields by the Head Groundsman and his Staff, their care and maintenance cause considerable concern. There is so much trespass and damage on the part of the general public that the enclosure of all the fields owned by the Committee is an urgent necessity.

The various voluntary associations responsible for the promotion of recreational and recreative activities for school children outside school hours have again done splendid work. Amongst these associations the various branches of the Bradford Schools' Athletic Association deserve special mention. The members of this Association are keen, interested teachers who give ungrudgingly and voluntarily their services for the benefit of the school children of the city. This service is most highly appreciated.

Section 5

Mental Welfare

ADMINISTRATION

WORK UNDERTAKEN IN THE COMMUNITY

(*A*) PREVENTION CARE AND AFTER CARE

(*B*) UNDER LUNACY AND MENTAL TREATMENT ACTS BY DULY AUTHORISED OFFICERS

(*C*) UNDER MENTAL DEFICIENCY ACTS

OCCUPATION CENTRE

INDUSTRIAL CENTRE

TRANSPORT OF DEFECTIVES

Mental Welfare

Mental Health Service

H. V. Burke, *Mental Welfare Officer.*

1 ADMINISTRATION

(a) *Constitution and Meetings of the Mental Welfare Sub-Committee.*

The constitution of the Mental Welfare Sub-Committee is as follows:

The Lord Mayor.
Chairman: Councillor N. Fienburgh, J.P.
Deputy Chairman: Alderman F. Duce, J.P.

Members:
Alderman D. Black, Councillors E. Allen, A. Barber, J.P., W. M. Hird, and R. C. Ruth

Co-opted Members:
Mrs. M. F. Titterington, Miss Wedgeworth and Mr. A. Hudson

Monthly meetings are held.

(b) *Number and Qualifications of Staff employed in the Mental Health Service*

The present staffing of the Mental Health Service is as follows:

Medical Officer for Mental Health (vacant).
Mental Welfare Officer.
Three Duly Authorised Officers.
One Occupation Centre Supervisor.
Five Assistant Occupation Centre Supervisors.
One Mental Deficiency Social Worker.
Clerical Staff (2).
Psychiatric Social Worker (vacant).

(c) *Co-ordination with Regional Hospital Board and the Hospital Management Committees*

Arrangements for the Mental Health Service to perform all domiciliary visitation duties on behalf of the local "B" Group Hospital Management Committee, in respect of mental defectives, have continued. During the year this work has greatly increased, mainly by reason of the Hospital Management Committee having adopted the policy of placing out on daily licence all patients capable of following gainful employment. It is pleasing to be able to place on record the happy relationship which exists with the local "B" Group Hospital Management Committee and in particular its staff at the Westwood Hospital.

(*d*) *Duties delegated to Voluntary Associations*

No duties have been delegated to Voluntary Associations, but the Department keeps in touch with the National Association for Mental Health which continues to be of help and service in many ways.

(*e*) *Training of Mental Health Workers*

Students for the "Diploma" Course for Occupation Centre Supervisors promoted by the National Association for Mental Health have continued to attend our Occupation Centre for practical training.

(2) **Account of Work Undertaken in the Community**

(a) *Under Section* 28, *National Health Service Act,* 1946, *Prevention, Care and After-Care*

The Psychiatric out-patient Clinics under the auspices of the Leeds Regional Hospital Board at the St. Luke's Hospital and the Bradford Royal Infirmary have continued their facilities during the year and many cases have been referred by this Service; appreciation of the kindly co-operation of the Medical Superintendent of the Menston Hospital, who is in charge of these Clinics, is recorded.

The Menston Mental Hospital's own psychiatric social worker, who
ormerly undertook after-care visitation in respect of certain cases
aving that hospital, left during the year, but visitation of appropriate
ases was carried out by the Council's Authorised Officers. As was stated
st year, the services of a Psychiatric Social Worker are important in
eveloping our own facilities in this field; but notwithstanding the
ouncil's offer of our vacant post to an experienced psychiatric social
orker at maximum salary plus proficiency pay, the post remains
acant.

Co-operation with the Marriage Guidance Council has continued
appily during the year, as it has also with the local Child Guidance
linic of the Education Committee.

) *Under the Lunacy and Mental Treatment Acts*, 1890–1930, *by Duly Authorised Officers*

The demand for beds in mental hospitals in the Region has been such
to make the task of the Duly Authorised Officers a somewhat frus-
ating one, and from time to time during the year it has been quite
npossible to obtain vacancies for would-be voluntary patients. Never-
eless it is gratifying to record that of 280 persons dealt with under
e Lunacy and Mental Treatment Acts, no less than 110 were disposed
as "voluntaries" under Section 1 of the Mental Treatment Act, 1930;
a proportion of 40 per cent of the total cases dealt with.

Conferences have taken place with the local Hospital Management
ommittees with a view to obtaining sufficient accommodation for
ection 20" cases as, in its lack, the Duly Authorised Officers have
en hindered in taking initial action under the main Act. It is felt
at the constant need to take patients to accommodation outside
e City should be capable of redress in the circumstances that
tside Authorities bring so many cases to the limited accommo-
tion within the City. It is thought in this connection that
ufficient consideration has been given to the individual needs of local
thorities in the matter of initial action procedure under the Lunacy
d Mental Treatment Acts.

Notification of old people and their certification under the Lunacy Acts continues to demand very close surveillance. It will be seen from the statistics following, that of some 370 persons notified to the Duly Authorised Officers as of "unsound mind" no less than 125 were over 70 years of age. It is significant that of those some 25 died before any permanent arrangement could be made.

It is to be hoped that the Regional Boards will in time provide ample accommodation for the "aged and senile" outwith the province of the Lunacy Acts.

Statistics

The following figures show the number of cases dealt with under the Lunacy and Mental Treatment Acts during the year ended 31st December, 1950.

(a) and (b) *Under the Lunacy and Mental Treatment Acts*

	Males	Females	Total	Over 70 years of age	Death prior to further action	Discharges prior to further action	Certified under Section 16	Other Disposals: Section 1 Voluntary	Other Disposals: Section 5 Temporary
(*a*) Lunacy Act, 1890									
Order of Duly Authorised Officers (3 day, Section 20)	110	180	290	106	33	96	109	50	2
Section 11. (Urgency Order)	—	1	1	—	—	—	1	—	—
Order of Judicial Authority (14 day, Section 21)	8	24	32	15	3	10	9	10	—
Summary Reception Orders (Section 16). Direct to Mental Hospital	23	24	47	4	—	—	47	—	—
	141	229	370	125	36	106	166	60	2
(*b*) Mental Treatment Act, 1930									
Voluntary Cases, Section 1, Mental Treatment Act, 1930	28	22	50	6	—	—	—	50	—
Temporary Cases, Section 5, Mental Treatment Act	1	1	2	1	—	—	—	—	2
	29	23	52	7	—	—	—	50	2
Grand Total, Lunacy and Mental Treatment Acts	170	252	422	132	36	106	166	110	4

N.B.—Total visits paid in connexion with Lunacy and Mental Treatment Acts, cases 2,666. Of these 208 werei n respect of "After-care."

(*c*) *Under the Mental Deficiency Acts*, 1913–1938

(*i*) Ascertainment, including number of defectives awaiting vacancies in institutions at 31st December, 1950.

	M.	F.	T.
Ascertainment during the year 1950:			
Cases reported by Local Education Authority (Section 57) Education Act, 1944:			
(i) Under Section 57 (3)	23	19	42
(ii) Under Section 57 (5)	13	17	30
Others ascertained defectives reported during 1949 and found to be "subject to be dealt with"	1	8	9
Other reported cases ascertained during 1949 who are not at present "subject to be dealt with"	—	2	2
Total number of cases reported during the year . .	37	46	83
Disposal of cases reported during the year:			
Cases ascertained to be "subject to be dealt with"			
(i) Admitted to Institutions	2	3	5
(ii) Placed under Guardianship	—	—	—
(iii) Taken to places of safety	—	1	1
(iv) Placed under Statutory Supervision	34	40	74
(v) Died or removed from area	1	—	1
Cases not at present "subject to be dealt with":			
(i) Placed under voluntary supervision	—	2	2
Total	37	46	83
Number of mental defectives awaiting removal to institutions as at 31st December, 1950	6	4	10
Number of Bradford cases in institutions for mental defectives as at 31st December, 1949	221	166	387

(*ii*) Guardianship and Supervision.

Particulars of mental defectives as at 31*st December*, 1950:			
(*a*) Under Guardianship Orders	4	2	6
(*b*) Under Statutory Supervision (excluding cases on Licence)	363	269	632
(*c*) Under Voluntary Supervision	27	10	37

During the year over 1,420 visits have been made to the homes of mental defectives; 620 visits being on behalf of the local "B" Group Hospital Management Committee paid, it must be said, at the cost of visitation to cases under our own supervision. It has been possible to place many defectives in local employment.

Again the small number of defectives appearing before the City Courts (three Section 8 Orders have been made during the year) is thought to indicate the good effects of the close contact maintained with defectives and their families.

Clothing for defectives has been supplied by the Corporation through its Mental Health Service in several cases during the year, and financial assistance and sympathetic employment provided in certain cases. Reference of cases to the National Assistance Board has met with co-operation from the local offices of that Board.

Some 40 defectives have been placed out on licence on behalf of the local Westwood Hospital. Of these 17 are on daily licence in sympathetic employment. The number of defectives who have failed whilst on licence has been greater in proportion than last year, but this is doubtless due to the fact that a much wider line has been drawn by the Hospital Management Committee in the granting of such licences during the year.

(*iii*) Training

Guardianship

No new guardianship cases have been made during the year. Now that cases in need of financial assistance are provided for by way of National Assistance Board grants there is seldom reason to raise Guardianship Orders for the purpose of maintenance; and whilst there is need for them in respect of defectives inadequately provided for socially in the community, it is extremely difficult to find people who are willing to undertake the onerous duty of taking defectives into their own homes and assuming all the responsibilities of guardianship.

Occupation Centre

The Occupation Centre for ineducable mentally defective children which opened in September 1949 with an initial intake of 17 children, has progressed, and there were over 100 in attendance at the end of the year under review.

Conveyance by the Council's ambulance service has proved successful and doubtless accounts greatly for the very high average attendance.

"Open days" for parents are held each term and have proved to be very popular occasions.

As is mentioned elsewhere, the Centre has continued to provide facilities for practical training of students for the "Diploma" Course for Supervisors of Occupation Centres promoted by the National Association for Mental Health.

Arrangements have been made for a special class for spastics; appropriate furniture and equipment has been ordered and the class, under the guidance of one of the Assistant Medical Officers, commenced to function at the end of the year.

Industrial Centre

Arrangements for the opening of an Industrial Centre for unemployable adult defectives have progressed, and will, it is hoped, reach fruition during the year 1951.

Ambulance Services

Of the total of 500 patients removed during the year to mental hospitals, 490 were conveyed by ambulance and other transport of the Health Department.

As stated elsewhere in this report, the daily conveyance from their homes of mental defective children attending the Occupation Centre is carried out by the Council's Ambulance Service. The first of the Ambulance Sitting Car vehicles designed to accommodate sitting cases, was delivered during the year. Although based on the normal ambulance chassis, this vehicle has been specially designed to carry 18 children.

Section 6

Care and After-Care Services

HOME NURSING
HOME HELP
CONVALESCENT TREATMENT
MEDICAL LOAN EQUIPMENT
CARE OF THE ELDERLY
MEDICAL CARE OF CHILDREN (CHILDREN'S ACT)
BRADFORD CORPORATION SICKNESS SCHEME
HEALTH EDUCATION

Care and After-Care Services

S. HOWARD, M.B., Ch.B.

Senior Assistant Medical Officer, Care and After-Care Services

The care and after-care of persons suffering from illness or mental defectiveness covers an extremely wide field, and since the last report a separate department has been established at 22 Edmund Street, where the work of the Care and After-Care Services has been centralised and co-ordinated. The department is supervised by a Senior Assistant Medical Officer and embraces all sub-sections intimately concerned, e.g., Home Nursing, Home Help, Convalescent Treatment and the provision of Medical Loan Equipment.

Complete co-ordination between Hospitals, General Practitioners and the Public Health Department has not yet been established and we are still awaiting final agreement on a special form to be sent from the Hospital to the Medical Officer of Health on the discharge of all children and of adults who are considered to be in need of after-care. Without this most important co-ordination many households must be left without the help and advice they need.

The social worker on whom has been placed the major responsibility for carrying out the provisions of this Section is the Health Visitor. She already has the entrée to the home by virtue of her interest in the mother and young child. She will now be the assistant and helper of the medical practitioner in his advice to and care of the family. During 1950 the Health Visitors paid 784 visits in connection with care and after-care work.

Home Nursing

The Bradford District Nursing Council continued to be responsible to the Local Health Authority under Section 25 of the National Health Service Act, 1946, for the administration of the Home Nursing Service. The staff, on December 31st, 1950, consisted of 1 Superintendent, 1 Deputy Superintendent, 1 Second Assistant Superintendent, 1 Senior Nurse, 8 Staff Queen's Nurses, 1 Staff Male Queen's Nurse, 2 Student Queen's Nurses, 2 State Registered Nurses, 2 Part-time State Registered Nurses, and 1 Assistant Nurse.

The headquarters of the Council is situate at 93 Little Horton Lane, with adjoining branch homes at Buttershaw (2 nurses), Eccleshill (2 nurses), Thornton (1 nurse), Idle (1 nurse), Clayton (1 nurse).

The number of cases actually nursed during the year remained practically the same as in 1949, but there was a marked increase of 3,220 in the number of visits paid. This was due to the still increasingly large number of cases discharged earlier from the hospitals to be nursed at home, and the large number of visits paid at the request of general practitioners for the giving of injection treatments such as penicillin, mersalyl, strepto-mycin, etc.

The Second Assistant Superintendent was successful in gaining the Health Visitors' Certificate and the examination results for Student Queen's Nurses were 100 per cent passes.

The following are the details of the work done during the year 1950:

Classification of Cases

Cases on the books at 31/12/49 ..	301
New cases	2,207
Discharges	2,209
Remaining on books at 31/12/50 ..	299
Total Visits Paid	46,574

Classification of New Cases

Medical	1,583
Surgical	460
Gynaecological	156
Maternal Complications	8
Total	2,207

Domestic (Home) Help

The work of the Home Help Service has grown and the number now employed is 100 (42 full-time and 58 part-time Home Helps).

A total of 1,323 applications for domestic assistance was received during the year, and assistance was given in 1,072 instances. Obviously in cases where the demand exceeds the supply a certain system priority has to be drawn up. In the main the top priority was given to maternity cases and all other cases were judged on their merits. There was, however, an increased number of requests from elderly people, and strong efforts were made to give help, even though only a little, to all old people who asked for it. Cases of tuberculosis and chronic illness were also catered for, but, unfortunately, it was occasionally necessary to withdraw help from the chronic cases to give urgent temporary help in other directions.

Details of cases during the year 1st January to 31*st December,* 1950

(1949 figures in brackets)

Number of applications for help	1,323	(1,113)
Number of applications for help—Maternity cases	491	(438)
Average number of cases attended weekly	95	(76)
Number of cases attended free of charge	259	(139)
Number of cases where a charge was made	813	(575)
Amount collected during this period in respect of assessed charges	£3,690 5 6	
Amount paid in wages to Home Helps during this period ..	£11,013 12 4	
Amount paid in travelling expenses to Home Helps	£451 1 2	

Number of Home Helps employed at 1/1/50: Full time 30, part-time 21, total number 51 (equivalent to 37 full-time Helps working 48 hours a week).

Number of Home Helps employed 31/12/50: Full-time 39, part-time 22, total number 61 (equivalent to 47 full-time Helps working 48 hours a week).

Convalescent Home Treatment

In accordance with the after-care provisions of the National Health Service Act, 1946, arrangements have been made for certain patients who do not require immediate medical or nursing treatment to be admitted to Convalescent Homes for a period of treatment at a reduced cost or free of charge.

The majority of these cases go to the Semon Convalescent Home, Ilkley, which is administered by the Bradford Corporation Health Committee. This Home has long been associated with Bradford, as it was a gift of Mr. Charles Semon, a former Lord Mayor of Bradford. At the inception of the National Health Service Act, Bradford was in the fortunate position of having this well-equipped Convalescent Home, and it has therefore been possible to arrange for convalescent patients to have a period of treatment at this Home in accordance with the after-care provisions of the Act.

A number of mothers with young children up to 5 years of age are admitted under this Scheme to the Silver Jubilee Home, Heysham. This Home is administered by the Bradford Maternity Care Committee. The mothers are admitted free of charge, or at part cost, if they are certified as suitable for admission to a convalescent home. In most cases arrangements are made for the children to be sent free of charge through the Victoria Convalescent Fund.

A small number of patients who have been specially recommended for convalescent home treatment at the seaside are sent to private convalescent homes on the coast.

During the year 1950 138 persons applied for admission to convalescent homes through the Health Department: 37 cancelled their applications and 101 persons were actually admitted. These persons were admitted to the Convalescent Homes shown on the following table:

Name of Home	Number of Admissions
Silver Jubilee Home for Mothers and Children, Heysham	28
Semon Home, Ilkley	60
Blackburn and District Convalescent Home, St. Annes-on-Sea	7
Manchester and Salford Convalescent Home, Southport	3
Yorkshire Forresters' Convalescent Home, Bridlington	1
Women's Convalescent Home, Morfa Hall, Rhyl	1
Yorkshire Home for Mothers and Babies, Harrogate	1
Total	101

Most of the patients stay at these Homes for two weeks only, but an occasional extension of stay is granted in the case of patients admitted to Semon Home and to private Convalescent Homes on the special recommendation of either the matron or a doctor.

All patients admitted are recommended by the Hospital Almoners, Clinic Doctors or by Private Doctors, and each case is assessed according to the income of the family to ascertain the amount, if any, which the patient should pay towards the cost of maintenance in the Home.

The total number of weeks spent in Convalescent Homes by the 101 patients mentioned above during the year 1950 was 205: 38 of these paid part cost of their maintenance and 63 were admitted free of cost. The total cost to the Corporation was £487 9s. 6d.

Of the 101 patients admitted, 81 were recommended by private practitioners, 10 by hospital almoners, and 11 by Assistant Medical Officer of Health.

In the main, these patients consist of persons who have either been in hospital or who are recovering from an illness and require convalescent treatment so that they may be fit to return to work or be able to fulfil their household duties.

Medical Loan Equipment

The Health Committee is responsible for the provision of Home Nursing Equipment as part of their care and after-care arrangements made under Section 28 of the National Health Service Act, 1946.

In July 1948 the Committee set up a department at the Morley Street Health Centre for the distribution of equipment normally regarded as Home Nursing Equipment. The work of this department has increased considerably since its inception, as will be seen from the fact that in 1949 the number of applications received was 102 and the number of articles loaned 138; whereas in 1950 the number of applications received was 312 and the number of articles loaned 416, an increase of nearly 300 per cent.

The following table shows the type and numbers of articles loaned during the year 1950:

Type of Article	Number
Air rings	86
Bed cages	12
Bed pans	114
Bed rests	33
Bedsteads	8
Bed tables	6
Buckets	2
Crutches	2
Dunlo-mattresses	6
Diabetic scales	7
Feeding cups	10
Invalid chairs	33
Pole chains	5
Rubber sheets	66
Spirit lamps	1
Sputum mugs	7
Urinals	18
Totals	416

Persons applying for the loan of Home Nursing Equipment are informed that these articles are supplied on "loan" only for a period of 8 weeks in the first instance, renewable by personal or written application at the end of that period and each subsequent period of 8 weeks. The applicants are required to sign an undertaking when the goods are taken out that they will return the articles in good condition and will pay for any articles which are lost or damaged whilst in their care, other than that due to ordinary wear and tear.

No charge is made to the patients for the loan of Home Nursing Equipment.

With regard to the supply of invalid chairs, these are only supplied by the department "when required temporarily for after-care at home." A number of these chairs have, however, been supplied temporarily to chronic cases until they are able to obtain a chair permanently through the Ministry of Pensions. On making the application the patient is advised on the procedure which should be adopted in obtaining a chair permanently. Four of these patients have already obtained a chair from the Ministry and six have received notification that they will be provided with one at an early date.

In addition to the articles mentioned in the above table, bedding has been supplied to four cases of tuberculosis and two cases of paraplegia (paralysis of both legs) as follows:

Type	Number
Wool blankets	12
Flannelette sheets	2
Cotton sheets	20
Pillows	12
Pillow cases	22
Draw sheets	4
Total	72

The equipment usually loaned to cases of paraplegia includes bed and pole and chain, Dunlopillo mattresses and cushion, bed pan and urinal.

Bedding is not usually supplied as Home Nursing Equipment: only in exceptional cases such as those mentioned above.

Each application for the loan of Home Nursing Equipment must be accompanied with a certificate signed by a medical practitioner, district nurse, midwife, health visitor or hospital almoner.

The number of certificates received in 1950 from the undermentioned was:

Medical Practitioners	166
District Nurses	75
Hospital Almoners	46
Midwives	12
Health Visitors	13
Total	312

Liaison with the hospital services is very good and requests for equipment are frequently received from hospitals outside the city for patients who are about to be discharged and who are normally resident in the city. That the provision of Home Nursing Equipment is appreciated by patients and their relatives is evidenced by the number of letters received at the Care and After-Care Services Department and the fact that, on the whole, good care has obviously been taken of the articles loaned.

Care of the Elderly

The Senior Assistant Medical Officer is also responsible for the medical care of the elderly in accommodation under Part III of the National Assistance Act, 1948, and has a limited list of patients under the Bradford Executive Council, so that he is able to give treatment to these old people under the National Health Service. The elderly under his care are accommodated in "The Park" and in hostels at Clayton, Wyke, Idle and Rawdon. On admission each old person is given the option of remaining on the list of his own doctor or transferring to the list of the Medical Officer. The average number of patients for whom the latter is responsible is 490.

Daily visits are paid by the Medical Officer to "The Park" and he is available, should his services be required, at any time during day or night to visit patients who are taken ill at "The Park" or the hostels.

Section 47 (1) of the National Assistance Act provides for securing the necessary care and attention of persons who:

(*a*) Are suffering from grave chronic disease; or being aged, infirm or physically incapacitated, are living in insanitary conditions; and

(*b*) Are unable to devote to themselves, and are not receiving from other persons, proper care and attention.

A Court of Summary Jurisdiction may, on application by the Medical Officer of Health, order the removal of such persons to a suitable hospital or other place.

Several such cases have been visited during the year, and in no case has it been necessary to invoke this Section of the Act.

When a case is reported to the Health Department as being in need of care and attention, the medical officer in charge of the Care and After-Care Services visits the home and decides what action is advisable

Every effort is made to enable the person to remain at home, if ossible. Arrangements are made in suitable cases for the attendance f a district nurse, a home help and, where necessary, the supply of ome nursing equipment. In cases where it is considered impracticable or the patient to remain at home, arrangements are made for admission f the patient to hospital or to one of the welfare establishments.

Bradford Corporation Sickness Scheme

Medical examinations in connection with the above are conducted at he Care and After-Care Department. During the year 283 persons ere examined and reports furnished to committees.

Medical examinations to decide on the fitness of Corporation emloyees to be admitted to the Superannuation Fund are also carried out. he number of employees examined for this purpose during the year as 768.

Medical Care of Children (Children's Act)

The average number of babies and children who are in the care of ne Local Authority under the Children's Act is 330. They are accomodated in the Central Home in Park Road, the homes at Squire Lane, ne nurseries at Haworth Road and Killinghall Road and in 23 scattered omes throughout the City. There are also two hostels, one for working oys and one for working girls.

The medical care of these children is undertaken by the medical fficer in charge of the Care and After-Care Service. Medical examinaons are carried out on admission and on discharge, or on transfer to her homes. Examinations are carried out, too, for the purpose of oarding-out of children and for adoption, and routine medical examinaons are carried out periodically for each child according to Home Office gulations.

In addition to these examinations, the medical officer is general actitioner to the children. He has a limited list under the Bradford xecutive Council, and is thus enabled to treat the children under the

National Health Service. Immunisation is also carried out for the children.

A surgery is situated at the Central Home, at which the medica officer attends daily. If any child is ill and unable to attend at th surgery, a visit is paid by the medical officer to the child's home.

Health Education

As in the previous year the main propaganda efforts were directe towards building an informed public opinion in the matter of hygien and *danger foods*, and also to improving the hygienic standards o workers in the food trades. During the year lectures were given t numerous organisations on food hygiene (and food poisoning), an attention was drawn to the great increase in food poisoning and to th dangers of bad cooking, carriers, and poor sanitary conditions. Th special danger foods were emphasized, and in many cases film strip were provided to demonstrate the points raised. In regard to the worker in the food trades, towards the end of the year each factory in the Cit which had a canteen and more than 6 staff was circulated asking if the would be agreeable to a member of the Health Department staff givin a lecture, with a film strip, to the canteen staff at some quiet period o the working day. The response was most gratifying, and during 195 four lectures were given to a total of 78 canteen assistants. It is intende that these lectures shall continue throughout 1951 until all the canteen in the City have been visited. The lectures were well received and man questions were asked by the staff. In this way it is thought that a workers in the food trade will eventually hear the lecture, and not onl the enthusiast who is prepared to attend lectures outside his workin hours. Under the Chairmanship of the Vice-President of the Bradfor Chamber of Trade, the film, "A Case of Poisoning," was shown one even ing to a large audience of 250 people, and a short talk preceding th film was given by the Deputy Medical Officer of Health. The film wa repeated later at the Priestman School kitchen for the benefit of th staff of the School Meals Service of the Education Department. Her again, a short talk was given beforehand and questions answered at th conclusion of the film.

Education of mothers by Medical Officers and Health Visitors in the best methods of bringing up their children has gone on steadily in the Child Welfare Clinics scattered throughout the City. Here, also, pamphlets on baby feeding and the management of childish ailments have been distributed to the mothers, and there is no doubt whatever that great advantage has accrued. Instruction in the necessity for immunisation and vaccination has now become an integral part of the health visitor's work when the baby is between 3 and 9 months old, .e., at the time when the health visitor sees the mother and baby most frequently. This year greater emphasis was placed on diphtheria mmunisation than ever, as it was realised that as diphtheria became more uncommon, so would the fear of it tend to diminish. There was also another handicap placed on the immunisation campaign this year by the making public of the occasional association between immunisaion and poliomyelitis. The dysentery epidemic during the year also received attention, and much time was spent by the Medical Officers and nursing staff and Sanitary Inspectors explaining to parents and ood handlers how best to prevent a spread of infection. The exhibition stand in the Health Services Advisory Bureau showed many interesting opics loaned during the year from the Central Council for Health Education, and our programme of renting hoardings throughout the City to show health posters continued.

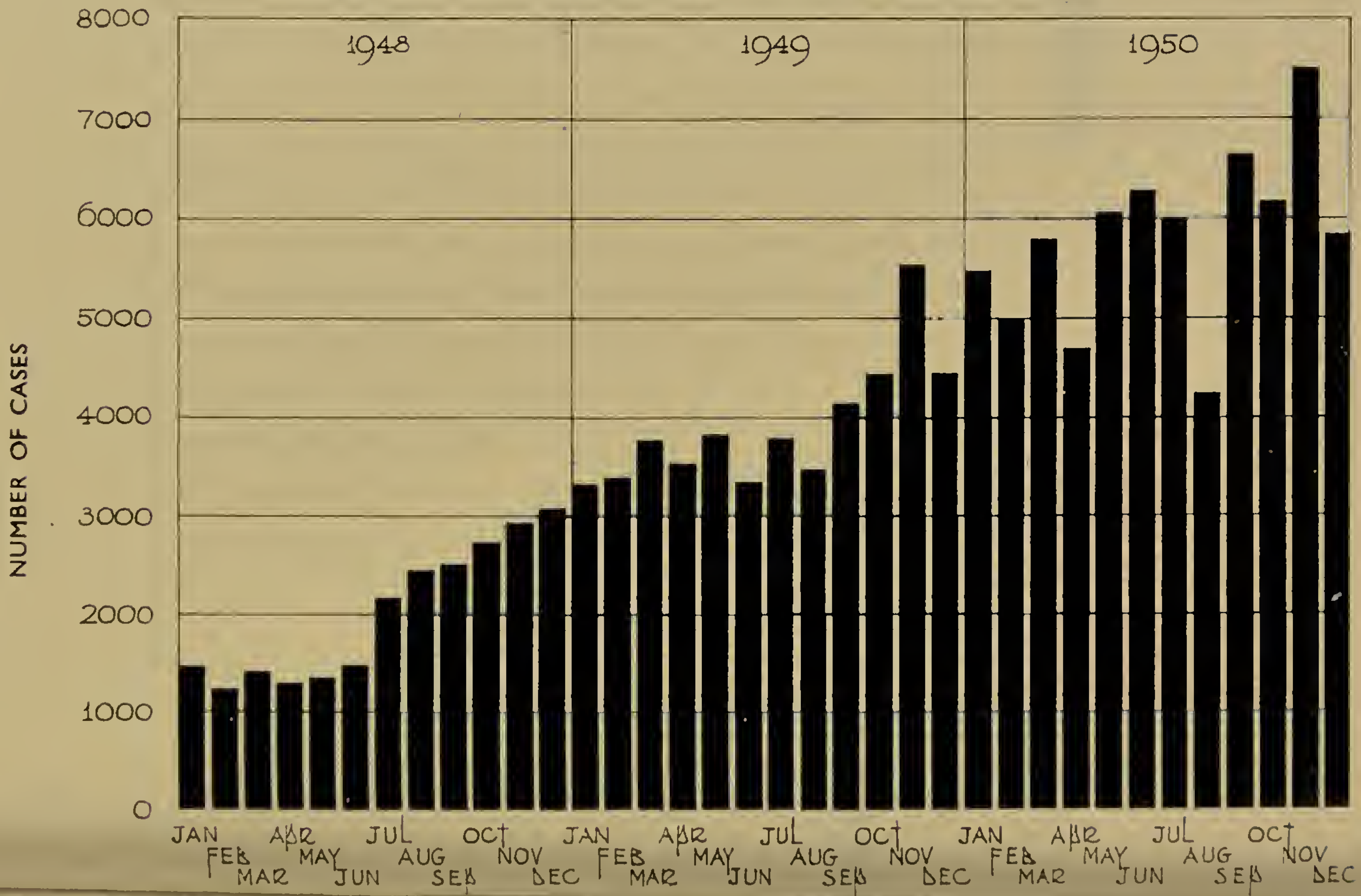
It should be pointed out that the Deputy Medical Officer of Health, he Chief Sanitary Inspector and Specialist Inspectors on the staff hold ppointments as part-time lecturers at the Bradford Technical College where they lecture and give practical demonstrations in hygiene, sanitaion and sanitary law, etc., to student sanitary inspectors and Sanitary nspectors who are studying for their Meat and other Food Certificates. n these courses every effort is made to inculcate these with the basic principles of health education so that the students, in their turn, may now how to pass on their information and knowledge to the general ublic when they have qualified.

Section 7

Ambulance Service

AMBULANCE SERVICE

REMOVAL OF CASES MONTH BY MONTH, 1948, 1949 AND 1950



Ambulance Service

W. R. BROWN, *Ambulance Officer*

The number of patients carried during the year showed a marked increase, and there is as yet no real sign of the peak having been reached. The demand for out-patient transport placed a heavy strain on the service, and, in spite of strenuous efforts, delays on some occasions were inevitable.

The St. John Ambulance Brigade has again undertaken work on behalf of the Local Authority on an agency basis to the extent of 36,000 miles.

As a result of the National Health Service (Amendment) Act, 1949, the long-distance ambulance work has been considerably reduced, as most Local Authorities are now exercising the option of collecting their own patients.

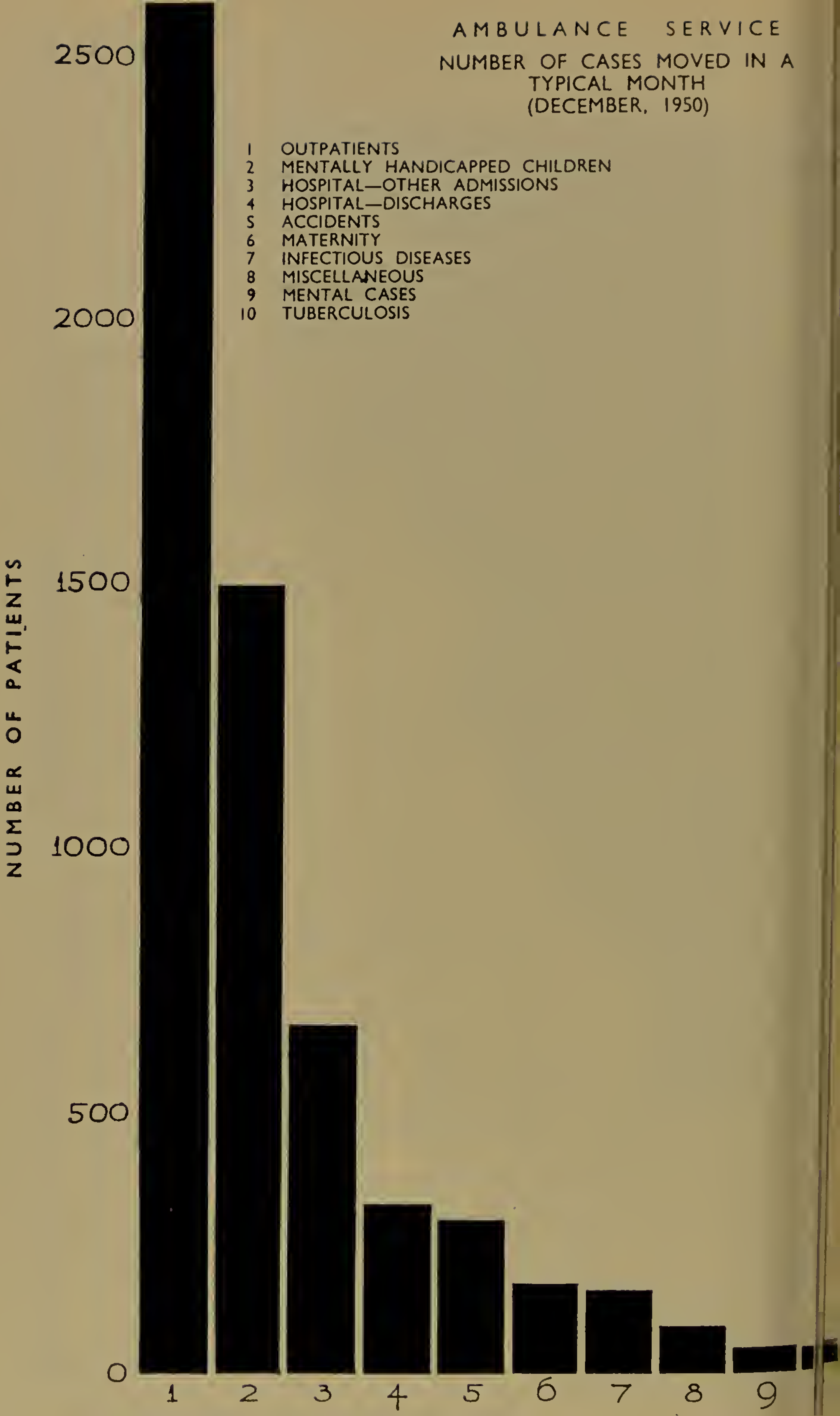
More patients have been transported by train than in 1949.

The special vehicles, designed primarily for out-patients and mentally handicapped children, which were put into operation in 1949, have proved of the greatest value.

Plans have been approved for increased office accommodation and for improvements to the station yard.

All repairs and maintenance of vehicles have been carried out on the premises by our own staff.

In May the Medical Officer of Health and the Ambulance Officer gave evidence before a Select Committee on Estimates of the House of Commons on the operation of the Bradford Ambulance Service.



AMBULANCE SERVICE

NUMBER OF CASES MOVED IN A TYPICAL MONTH (DECEMBER, 1950)

Table I *Service Activity during the year*

	Maternity	Infectious Diseases	Accident	Mentally Handicapped Children	Out-patients	All others	Total
January	148	118	223	1,691	2,143	1,170	5,493
February	151	124	200	1,585	1,899	1,039	4,998
March	122	149	175	2,290	1,952	1,129	5,817
April	147	120	223	1,147	1,975	1,085	4,697
May	141	151	245	2,017	2,242	1,316	6,012
June	154	134	280	2,038	2,519	1,166	6,291
July	125	145	260	2,078	2,370	1,020	5,998
August	126	128	262	—	2,629	1,090	4,235
September	147	120	244	2,592	2,633	923	6,659
October	120	133	243	2,156	2,461	1,036	6,149
November	139	131	250	3,095	2,843	1,053	7,511
December	170	160	298	1,490	2,597	1,116	5,831
Totals	1,690	1,613	2,903	22,179	28,263	13,143	69,691

Section 8

Inspection and Supervision of Food and Food Premises

- CLEAN FOOD CAMPAIGN
- MILK SUPPLY
- ICE CREAM
- FOOD AND DRUGS
- PHARMACY AND POISONS
- FERTILISER AND FEEDING STUFFS
- MEAT INSPECTION
- OTHER FOODS

Inspection and Supervision of Food and Food Premises

F. H. Myers, M.R.S.I., M.S.I.A., *Chief Sanitary Inspector*

In Bradford the inspection of food is carried out by Inspectors who have specialised in different branches of the subject; and premises where food is handled, stored or sold are visited by Inspectors who cover the obligations of the Local Authority under the Shops Act, 1950, and at the same time enforce the cleanliness provisions of Section 13 of the Food and Drugs Act, 1938, thus saving duplication of visiting.

Clean Food Campaign

It was recorded in the annual report for 1949 that as part of the cleaner food campaign a survey had been carried out of all the premises n the City connected with the food industry and they were classified "good," "fair" or "bad." The "bad" one was eliminated, and during the year under review it is pleasing to report that a number of the "fair" ones have been up-graded to the "good" category. Improvements which involve structural alterations are slow to progress and are impeded by the licensing of building works, but many internal improvements have been effected in existing structures. Most of the premises used for food now have proper washing facilities for the persons employed therein, and at every visit the inspectors encourage the food handlers to use them.

This may sound simple, but it is not easy to impress everybody with the necessity of hand cleansing, particularly if the hands are not visibly soiled, yet the visually clean hand which is not washed after every visit to the toilet remains one of the potent carriers of infection with the organisms of food poisoning. The lectures given to canteen assistants help, but the best inducement is the provision of a wash basin in every toilet, a provision which is not enforceable, but one which an increasing number of employers are coming to realise is an essential if their goods are not to be blamed for outbreaks of disease.

Meat inspection has been simplified by the centralisation of slaughtering at St. James's Abattoir, and the many difficulties obstructing satisfactory inspection in widely scattered, badly constructed and ill-equipped private slaughterhouses no longer assail the inspector. The pre-war use of such places must never be allowed to return if we are to serve the public properly in this important section of our work.

Following strong representations from this Department, the transport of meat from the abattoir to the retail butchers has been revolutionised by the provision of proper vehicles and adequate clothing.

As the construction of new pasteurising plants is progressing rapidly it is hoped that the time is in sight when the Minister will be able to declare Bradford a designated area in which the retail sale of raw milk other than milk from tuberculin-tested and accredited herds will be illegal.

Milk Supply

The total amount of milk consumed daily in the City was abou 24,000 gallons. This total consisted of approximately 6,000 gallons of raw farm milk and 18,000 gallons of processed milk. Regular sampling o these supplies has been carried out during the year for chemical analysis bacteriological examination and to ascertain the presence of infectio

A perceptible increase in the consumption of processed milk is note and is welcomed in view of the incidence of tuberculosis in the far milks. No outbreaks of milk-borne disease occurred during the yea

Milk and Dairies Regulations, 1949

There were, at the end of the year, 821 persons registered for the sale of milk within the City. These may be classified as follows:

Dairymen	151
Shops where milk sold in sealed bottles only	670

In addition to the above there were 150 producer retailers engaged in the sale of milk within the City.

The number of visits made was 594 and, generally, conditions were found satisfactory.

Five licences to pasteurise milk and one licence to sterilise milk were granted. Approximately 11,000 gallons of milk were processed in the City daily.

Tuberculosis in Milk

From 1st October, 1949, important new powers were given for enforcing the best treatment of milk supplies found to be infected with tubercle bacilli, until milk was known to be free from infection. It was decided to intensify the sampling of milk produced in Bradford to find the extent to which the milk was infected and to utilise the new powers for rendering such milk safe until the affected animal had been removed from the herd and slaughtered. The results achieved during 1950 have fully justified this policy.

There were 231 dairy farms engaged in the production of milk in Bradford, and in addition milk from 73 farms outside the City boundary was sold here. A total of 680 samples from these milks was examined biologically at the Public Health Laboratory during the year. 31 of these samples were found to contain tubercle bacilli.

As a result of investigations arising from these reports it is known that 24 tuberculous cows have been slaughtered. In 11 cases where the infected cows could not immediately be ascertained, notices were served n the farmer requiring all milk produced at the farm to be adequately pasteurised before sale. It is estimated that a total of 15,000 gallons of infected milk was made safe for consumption in this manner. In 9 cases animals had left the farm before the sample report was known, but it is believed that these found their way through the markets to a slaughterhouse.

The following table shows the incidence of tuberculosis found in the different grades of milk during the past 3 years.

	1948	1949	1950	Totals
Tuberculin Tested Herds				
Samples taken	38	89	169	296
B. tuberculosis found	—	—	—	—
Accredited Herds				
Samples taken	148	177	233	558
B. tuberculosis found	5	4	14	23
Ordinary Herds				
Samples taken	149	159	278	586
B. tuberculosis found	7	4	17	28

Chemical Examination of Milk

Seven hundred and thirty-seven samples were analysed. The results show that 10 of the samples gave an analysis under 3·0 per cent of fat and 539 over 3·5 per cent of fat, while 95 of these samples gave an analysis under 8·5 per cent of non-fatty solids. The total below both 3·0 per cent of fat and 8·5 per cent of non-fatty solids was 7. In most cases the adulterations were small and warnings were issued. Legal proceedings were instituted in one case, the vendor being fined £3 and ordered to pay £2 2s. costs.

Examination of Raw Milk

Samples of raw milks were taken regularly during the year for bacteriological examination. In the cases of unsatisfactory samples the examination reports were notified to the Ministry of Agriculture and Fisheries with a request that investigations be made at the farm with a view to improving the cleanliness of the milk.

Samples Taken	Methylene Blue Reductase Test	
	Pass	Fail
729	645	84

Examination of Heat-Treated Milk

Samples of heat-treated milk were taken regularly and included milk processed at dairies both in Bradford and outside.

In the cases of unsatisfactory samples the Bradford dairies were visited and investigations made into the methods of milk handling and cleansing and sterilisation of equipment. When an unsatisfactory sample from a dairy outside Bradford was obtained a request was made to the enforcing authority for that area to take similar action.

Class of Milk	Number of Samples	Phosphatase Test Pass	Phosphatase Test Fail	Methylene Blue Reductase Test Pass	Methylene Blue Reductase Test Fail	Turbidity Test Pass	Turbidity Test Fail
Tuberculin Tested							
Pasteurised	157	156	1	157	—	—	—
Pasteurised	346	344	2	330*	5	—	—
Sterilised	24	—	—	—	—	24	—
Heat Treated	18	18	—	18	—	—	—

* 11 tests void.

Ice Cream

During recent years ice cream has changed from being a seasonal delicacy to a regular article of diet throughout the year. In consequence much attention has been paid to the conditions under which it is manufactured and sold, as this product is a favourable medium for the growth of bacteria.

Many visits of inspection were made and the cost of building alterations and new plant purchased as a result of recommendations made is estimated to be of the value of £40,000. This new machinery and plant was necessary in order that premises could be brought to the standards laid down by the Ice Cream (Heat Treatment) Regulations, 1947. New machinery included heaters, coolers, freezers and refrigerator storage units. Formerly, at some premises, the methods of cooling the ice cream mix during manufacture were unsatisfactory, but the installation f refrigerated coolers obviated these difficulties.

Steps were taken to prevent the contamination of ice cream sold fron stalls and vehicles in the open air. As a protection against excessiv sun and other weather conditions all stalls and vehicles were suitabl screened or covered and provided with service hatches. Provision wa made for the washing of hands and the cleansing of ice cream utensil by the installation of hot water units.

Bacteriological Examination

Two hundred and eighty-four samples were submitted for examinatio during the year and they were graded as follows:

Provisional Grade	No. of Samples
Grade I	179
Grade II	52
Grade III	31
Grade IV	22
	284

This follows the grading recommended by the Medical Researc Council using the modified methylene blue test. Grade I indicates good standard of purity and Grade II is acceptable, but all samples i Grades III and IV were followed up, plant was examined, methods c handling investigated and improvements effected.

Chemical Examination

During 1950, although there was no prescribed legal standard c composition for ice cream, 92 samples were submitted to the Publi Analyst for chemical examination, and the results of this analysis ar tabulated below:

Fat Content of Samples, 1950

Fat	Under 2½%	2½–4 %	4–5 %	5–6 %	6–7 %	7–8 %	8–9 %	9–10 %	10–11 %	11–12 %	Above 12%	Tot
No. of Samples	1	7	8	23	17	11	13	4	4	2	2	92

Food and Drugs

The number of samples of food and drugs taken under this Act and submitted to the Public Analyst for analysis by the sampling officer was 1,230. Of these 1,161 were certified as genuine and 69 adulterated or doubtful. (The latter including 35 adulterated milks reported in the milk section.)

In the majority of cases the adulterations were small and the vendors were cautioned. In one case, however, it was considered that the institution of legal proceedings was warranted, and a conviction was obtained under the Food and Drugs Act, 1938, the manufacturer of the food being fined £1 and ordered to pay £3 3s. costs.

A table showing the number of samples procured and examined during 1950 will be found in the Appendix.

Continued vigilance has been exercised on premises throughout the City to ensure the enforcement of the Merchandise Marks Act, 1926.

Pharmacy and Poisons Act, 1933

The Act places duties on this Authority in relation to the control over the sale of poisons included in Part II of the Poisons List. This list ncludes certain poisons such as arsenical substances, mercuric subtances, nicotine, phenols, nitrobenzene, ammonia, etc., used principally or agricultural, horticultural, industrial and sanitary purposes.

The duties entail the enforcement of compliance with the provisions f Part II of the Act and Poison Rules made under the Act relating to he sale of these poisons.

The number of applications for entry on the List of the Local uthority under the above Act was 670. The following table sets out ne number of persons entered according to the respective trades. Each f the premises were inspected when applications were received.

Number	Nurserymen	Hardware Dealers	Herbalists	Hairdressers	Grocers and General	Photography
670	10	94	6	9	550	1

Fertilisers and Feeding Stuffs Act, 1926

Sampling was carried out under this Act, various meals and fertilisers being submitted to the City Analyst.

A table showing the number of samples procured and examined will be found in the appendix.

Meat Inspection

The general working of the abattoir has been carried out in a satisfactory manner, although the buildings and equipment are not adequate for the large increase in the number of all types of animals slaughtered.

Improvements are contemplated by the Markets and Fairs Committee. It is proposed to install four stunning pens and a series of electric winches. These installations will greatly increase the potential slaughtering capacity and are desirable from a humane point of view, as it will then be possible to keep live animals awaiting slaughter entirely separated from the main slaughter hall where animals are already being killed and dressed.

The total number of animals slaughtered at the abattoir during the year shows a marked increase, with a corresponding increase in the number of carcases found unfit for human consumption. The total amount of imported frozen and chilled beef, however, showed a decrease.

During the year 33 carcases of beef were found to be affected with the parasite Cysticerus Bovis. These carcases were refrigerated at a temperature of 14°F. for 21 days and were then released for manufacturing purposes. There were no cases of notifiable disease found in the abattoir; there was, however, a large increase in the number of pigs slaughtered under the Swine Fever Order, 1938. Each case was notified to the City Police who, under the Disease of Animals Act, are responsible for their destruction.

Five cases of Tuberculosis in calves under the age of 14 days were found. In all cases the Ministry of Agriculture and Fisheries were informed, and the herds from which the calves originated were examined by a veterinary inspector.

Twenty-six animals were slaughtered at the abattoir under the Tuberculosis Order, 1938, and in nearly all such cases the discovery of the disease was a direct result of the routine sampling of farm milks.

The transport of meat from the abattoir to the retail shops has shown a marked improvement. All the vehicles used for this purpose are now of the insulated container type and possess special filters at all the ventilators. A new type of white plastic enamelling has been installed in some of the containers and this has proved highly successful. It is easy to keep clean, hard wearing and greatly improves the appearance of the vehicles. Clean overalls and washable head coverings are provided for the operators twice weekly, and it is hoped to increase this issue to 3 sets per week at an early date.

There are 451 butchers shops situate within the City boundary, 35 of which are exclusively pork butchers. 419 of these shops are in excellent condition and are maintained in the high standard of cleanliness required in a butcher's shop. These premises are classified "A," 32 shops classified "B" require some further improvement or replacement, and in the majority of cases the work is already in hand.

Regular inspections were carried out throughout the year of the retail shops, the total number of visits being 1,625.

Other Foods

Supplies of fish, fruit and vegetables were regularly inspected throughout the year in the St. James's Wholesale Market, the wholesale fish warehouses and retail shops.

Certain foods were found, after inspection, to be unfit for human consumption, and by arrangement with the Corporation Cleansing Department, such of the produce as was fit for the purpose was converted into animal feeding stuffs. Details regarding this condemned food will be found in the Appendix.

Section 9

Environmental Hygiene

- DISTRICT INSPECTION
- COMMON LODGING HOUSES
- HYGIENE IN FACTORIES AND WORKPLACES
- OUTWORKERS
- RAG FLOCK ACTS
- SHOPS INSPECTION
- RODENT CONTROL
- SMOKE ABATEMENT
- HOUSING
- BRADFORD CORPORATION ACT, 1949
- ESTABLISHMENTS FOR SPECIAL TREATMENT
- HAIRDRESSERS AND BARBERS

Environmental Hygiene

F. H. Myers, M.R.S.I., M.S.I.A., *Chief Sanitary Inspector*

The Sanitary Inspector is still concerned with the sanitary circumstances of the City, but how far we have travelled since the passing of the Public Health Act, 1875! Most of the duties laid upon the Inspector under that Act are still his responsibility, and additional duties have been placed upon him with the scientific development of modern amenities.

However, the most striking change has taken place in the trend of his work in the direction of social science. People still flock to the office if they have a foul smell in the house, a leaking roof or a choked drain. But more and more people come for advice about their housing problems, and inspectors are often requested to call at houses only to find that they are really being asked to act as liaison officers with the Welfare Authority, the Home Help Service or the Housing Authority. Problems regarding the indecipherable Rent Restriction Acts are a daily occurrence, but some of the most disturbing cases brought to our notice are the old people who live alone. Often they have outlived their relatives and have no close friends. They have a false opinion ot their abilities and are sure they will be able to clean up soon. They cannot always be helped by the overburdened Home Help Service, and, indeed, often refuse to avail themselves of it. Thus someone passes information to the Department and the Sanitary Inspector makes a visit. In one such case the house presented a bad appearance from outside because the windows were filthy, and on approaching the door a foul smell was observed because several cats were kept therein. The Inspector was able to persuade the occupier, a spinster of 82, to let him bring in the

R.S.P.C.A. and remove all the cats except one. The next step was to get in a Home Help to clean up, but no woman could start until space was created to turn round and work. The cottage had only one room, but in that room the old woman had accumulated so much furniture, crockery, etc., that every available inch of floor space was covered, and every article had something else on top ot it. A large glass case full of china entirely covered the sideboard, and on top of the glass case was another full of stuffed birds. The table was piled high with pots and pans, with one small corner reserved for meals, and so on. What is one to do in such a case? The woman refused to part with anything and flatly refused to go to a Welfare Home even if accommodation could be found in one. Her mental faculties were not impaired and she was happy to be left alone. She was a source of annoyance to her neighbours because they imagined that she would become verminous and that the bugs would travel into their premises, hence their frequent complaints.

Such problems occupy more of an inspector's time to-day, and they cannot be lightly dismissed, because in each one some person's life an happiness are wrapped up, and it would seem that the Sanitary Inspector of the future must regard himself more and more as a social worker concerned with the people themselves as well as with their environment.

District Inspection

The City has been divided into districts for administration purposes and on each one a District Sanitary Inspector is responsible for all the routine work, including visits in connection with cases of some infectious diseases. Special attention is given to possible sources of infection an to tracing contacts. Other duties, such as those laid on the Council by the Factories Act and the Shops Act are carried out by Specialised Inspectors who cover the whole City in regard to their own subjects.

The District Sanitary Inspectors made 45,941 inspections and follow up visits in connection with the investigation and suppression o nuisances. The total number of nuisances reported was 6,656. Th statement in the Appendix shows the nature and the amount of work carried out by the District Inspectors during the year. Much of the work of the District Inspectors results from complaints received in the Department and on the districts, and nuisances are ascertained from these sources. There were 3,968 such complaints as against 3,726 the previous year. Much valuable work was carried out by persuasion, but it was necessary to serve 2,689 statutory notices regarding the abatement of nuisances as compared with 2,958 the previous year.

It is, perhaps, too much to expect that such a number of nuisances would be abated without difficulty, and in 26 cases it was necessary to institute proceedings in the City Court. All these proceedings were successful, and in the majority of instances fines were imposed, as illustrated in the Appendix. In addition, in 13 cases, work was completed following service of the summons and before the hearing took place, proving the value of taking this firm line of action.

It will be observed from the statistics that a considerable number of the notices served by the Department have been executed in default, and this power is a considerable lever when requesting work prior to serving statutory notices.

The District Inspectors supervised 1 exhumation during the year, which was carried out satisfactorily and without nuisance.

Good use has been made during the year of the new section in the Bradford Corporation Act, 1949, which gives power to require the cleansing of choked drains within 24 hours, and of the power to execute such notices in default.

Throughout the year routine samples of water for bacteriological examination were submitted and 386 such samples obtained from different points in the City were reported upon. In addition, 62 samples were taken during the flood period of the winter in the Allerton and Thornton Wards, from all those sources of supply not connected to the public mains for comparison with the samples taken during the drought of the summer of 1949. Again these samples showed gross pollution in the majority of instances. As a result a scheme was formulated in consultation with the Waterworks Engineer for the extension of the mains to the nearest points on the highway necessary to make possible the connection of all dwellings by the shortest route. This scheme is to be placed before the Ministry of Agriculture and Fisheries for grant. The results of the analysis for plumbo-solvency of the City water taken during the year are shown in the Appendix.

When dealing with verminous dwellings under the provisions of Section 83 of the Public Health Act, 1936, the policy has been developed of not doing work in default but of prosecuting the culprits in the City Court, where continuing penalties are pressed for; it has been found that this has a most salutary effect in regard to the eradication of vermin. Six such cases necessitated proceedings, and all were successful.

A successful prosecution has been taken under Section 23 of the Bradford Corporation Act, 1949, against a shopkeeper who was found selling bug-infested second-hand bedsteads, and this resulted in a fine of £5 with £2 2s. costs.

Common Lodging Houses

At the end of the year there were 5 registered common lodging houses in the City, comprising 26 sleeping rooms and affording nightly accommodation for 280 males, 4 females and 4 couples.

The total number of persons accommodated during the year was 85,270. The nightly average was 233, representing 83·2 per cent of the accommodation available.

The following table shows the number of nights spent by single men, women, young persons and couples in common lodging houses during the year:

Adults			8 to 21 years		Under 8 years	
Males	Females	Couples	Males	Females	Males	Females
83,853	1,417	—	—	—	—	—

All the houses have been lime-washed and cleansed in accordance with the Public Health Act, 1936.

The total number of inspections made during the year was 107. There have been no cases of infectious disease reported during the year in any Common Lodging House. No difficulties have been experienced in gaining admittance and it has not been necessary to resort to Police Court proceedings.

Hygiene in Factories

During the year H.M. Inspector of Factories referred 17 cases where contraventions of the Health Provisions of the Factories Act were found to exist and which are enforced by the District Council. For the purpose of investigating such complaints and for the general inspection of workrooms in factories where no mechanical power is employed, 204 inspections were made. With few exceptions the Health provisions of the Act were reasonably well observed.

In connection with Section 7 (Sanitary Accommodation), which applies to all factories, 1,055 inspections were made for the purpose of investigating complaints and for the supervision of work in progress. It is gratifying to report that the improvements in the standard of work involved in the provision of new and reconstruction of existing sanitary accommodation has been maintained. An appreciable percentage of the work done in connection with improved sanitary accommodation is the result of the execution of voluntary schemes. Such schemes are part of a plan to improve the general conditions and working conditions, particularly in textile factories, where difficulty in obtaining suitable labour has been experienced for some time.

Generally, a more intelligent approach and a higher standard of workmanship has been noticed in connection with the plumbing installations. In some of the multi-storied factories the "one-pipe" system of drainage has been installed with distinct advantages both as to appearance and costs. In this part of the country, owing to the periodic troubles encountered after severe frosts, careful consideration has to be given to "one-pipe" schemes, and, where possible, the system is installed inside the buildings.

A copy of the return sent to the Ministry of Labour and National Service, together with a summary of the work involved in complying with the Act will be found in the Appendix.

Hygiene in Workplaces

These include places where persons are employed otherwise than in domestic service, but do not include factories and shops.

During the year 377 visits were made to workplaces for the purpose of inspection and supervision of work carried out. In 20 cases the sanitary accommodation was improved, mostly by voluntary schemes submitted by the owner or occupier.

A pronounced improvement has been observed in the matter of cleanliness of workplaces and the provision of sanitary accommodation for the employees.

A good deal of work has been carried out in the construction of new and reconstruction of existing offices, and the introduction of new materials and methods of fixing has simplified the forming of offices and encouraged more frequent re-decoration. The decorations are usually carried out in brighter colours, and this has had the effect of imparting a more pleasant atmosphere in this class of workplace.

The standard adopted in the provision of new and the re-construction of existing sanitary accommodation has been high, and low-down siphonic water closet suites with washbasins in the adjoining lobbies, and with impervious walls finished in bright colours has brought about an all-round improvement from a hygienic point of view.

As will be seen from the table in the Appendix, the work has been mainly in connection with the sanitary accommodation.

Outworkers

The register of outworkers was kept up to date and during the year 603 persons were included in our lists. Many were visited, but in no case was it found necessary to take action stopping the sending of work to such premises.

Rag Flock Acts, 1911—1928

During the year ten samples of rag flock were submitted to the City Analyst and all were found to conform to the standard of cleanliness laid down. It was noticed that less rag flock was being used in the manufacture of upholstery, cushions and bedding, and that materials which were likely to be cleaner and more hygienic were being adopted.

Shops Inspections

During the year the Shops Acts, 1912 and 1913; Shops (Hours of Closing) Act, 1928; Shops Act, 1934; Shops (Sunday Trading Restriction) Act, 1936; Retail Meat Dealers' Shops (Sunday Closing) Act, 1936; together with certain sections of the Young Persons (Employment) Act, 1938; were consolidated into the Shops Act, 1950. This Act gives additional powers to local authorities to fix the time for winter closing of shops within certain limits, which additional powers were formerly regulated under Defence Regulation 60, A.B.

The total number of shops on the register was 7,106, and the number of visits and investigations made under the Shops Act, 1950, was 6,695. The number of shops visited in which young persons were employed was 234. Visits were made during the day to ascertain if the necessary forms were used and affixed to the premises and to ascertain what were the general conditions under which the assistants worked in such shops, and visits were also made at night to ascertain whether the various closing orders were being complied with. In 14 instances shops were found open and occupiers selling non-exempted articles on the weekly half-day holiday. These offenders were cautioned.

Sunday Trading

During visits and observations on Sundays no shopkeepers were found open contrary to the provisions of Shops Act, 1950. Where shops were legally open it was found in 41 instances notices were not displayed stating for what purpose the shop was open. In these cases the offenders were warned. In 32 instances occupiers were found selling non-exempted articles on Sunday. These offenders were cautioned. Prosecutions were instituted in two of these cases and fines of 40s. and 10s. respectively were imposed.

It is interesting to note that there is now one retail shop to every 44·3 persons.

Exhibitions

During the year two applications were received to hold exhibitions and in both cases the City Council granted the applications.

Details of the visits made, of the defects found, and of the works carried out are shown in the Appendix.

Rodent Control

During the year 2,378 properties were inspected and 1,023 were found to be infested by rodents. Of these 468 were infested by mice and 555 were infested by rats. Of this latter 4 were classed as major infestations. Dealing first with the 1,019 minor infestations, 1,274 ounces of poison were consumed. The number of bodies found was 361, but with the system adopted only a percentage of the bodies are recovered, and working on the formula laid down by the Ministry, it was estimated that 3,185 rodents were killed.

In dealing with the 4 major infestations, 23 pounds of bait were used and 42 ounces of poison were consumed. 49 bodies were found and the estimated kill was 115.

Throughout the year work proceeded in regard to the rats in the public sewers. Originally the City was divided into 33 areas and 3,568 manholes were examined and baited and 1,292 manholes were poisoned

In all this work the bait used was sausage rusks, and in the vast majority of cases the poison used was Zinc Phosphide. Where a second treatment was necessary, bread mash and arsenic were used as alternatives. 122 routine visits were also made to Corporation properties where infestation is likely, viz., school dining centres and canteens, markets and abattoir, tramway depot canteens and Corporation tips, etc., and infestations found were treated forthwith.

Post-mortem examinations have been performed on numbers of rats and mice killed in the City during the year as a routine check on the bowel organisms which may be carried by these dangerous reservoirs of infection.

In May the City Council decided that no further charges should be made for rodent control in dwelling-houses, thus removing the main deterrent to reporting infestations, and this may well be a major step towards reducing the rat and mouse population of the City.

Smoke Abatement

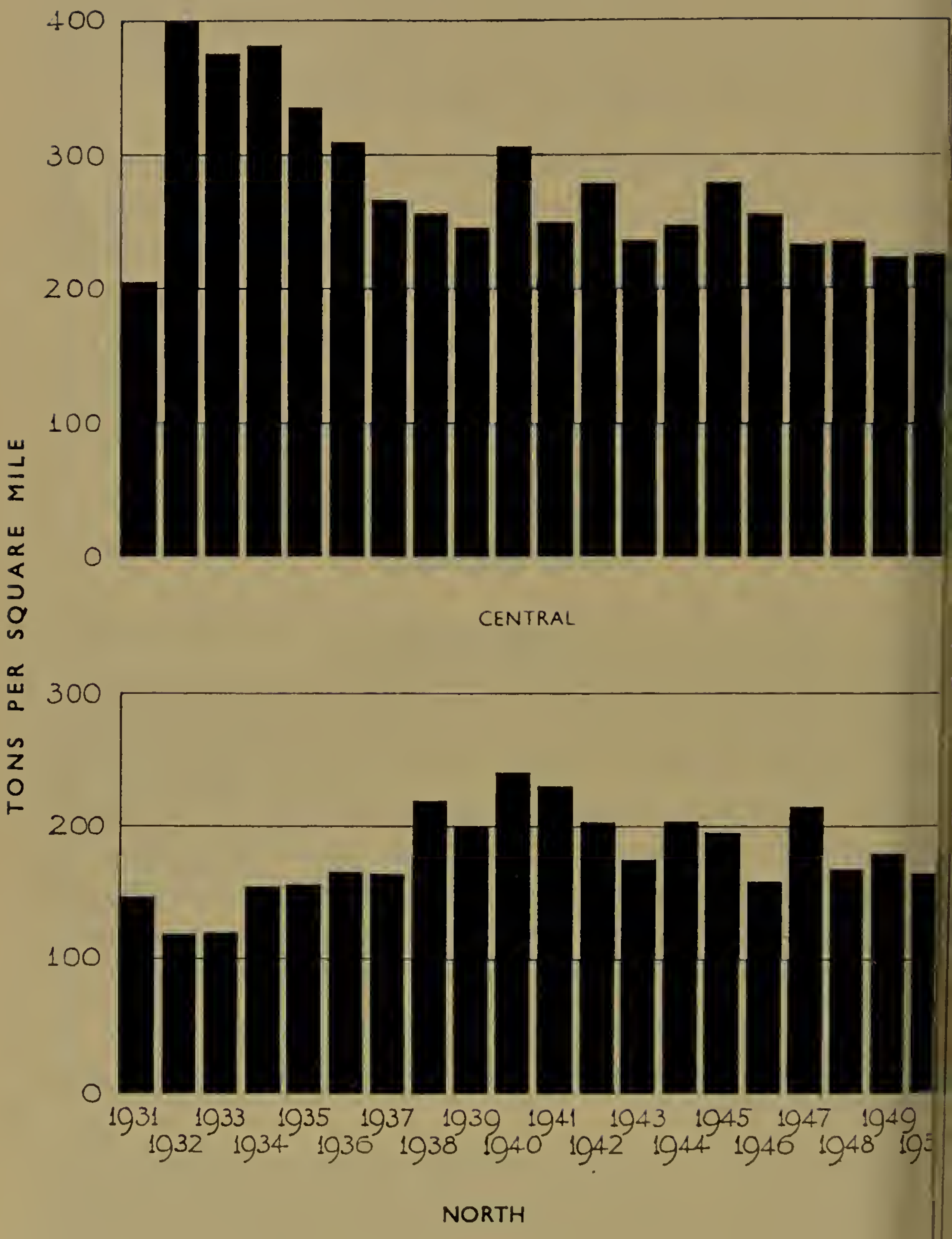
The work in connection with smoke abatement is still being carried out by officers having other duties to perform.

During the year 15 complaints of nuisances from smoke and 3 complaints of grit-fall were investigated. There were also made 63 observations of chimneys, and where black smoke was emitted for 3 minutes or more in the aggregate in a continuous period of 30 minutes, the premises were visited and the person responsible for the management of the plant warned verbally. In every case further observations showed an improvement and it was not found to be necessary to serve a statutory notice. 516 visits were made in connection with this work and for the purpose of bringing up to date our records of boiler plant and coal consumption in the City.

These records show that there were 334 chimneys in connection with factories, schools, hospitals, departmental stores and public and commercial buildings (including the central power station). The records

ATMOSPHERIC SOLUTION

ANNUAL DEPOSITS AT BRADFORD CENTRAL AND BRADFORD NORTH. 1931–1950



show that on the average in these factories, etc., there is a weekly consumption of 17,800 tons of coal and approximately 11,000 gallons of oil. The weekly summer consumption is slightly over 13,600 tons of coal and approximately 2,000 gallons of oil. The weekly average consumption summer and winter appears to have been approximately 13,500 tons of coal in 1938.

In relating the coal consumption with the deposit gauges we found that whilst the non-domestic coal consumption for 1950 has increased by 14 per cent, the mineral deposit as measured for the centre of the city (Britannia House) has decreased by 18 per cent, whilst that measured in the north (residential) has decreased by only 7·2 per cent. The years taken for comparison are 1936–7 and 8 and 1948–9 and 1950.

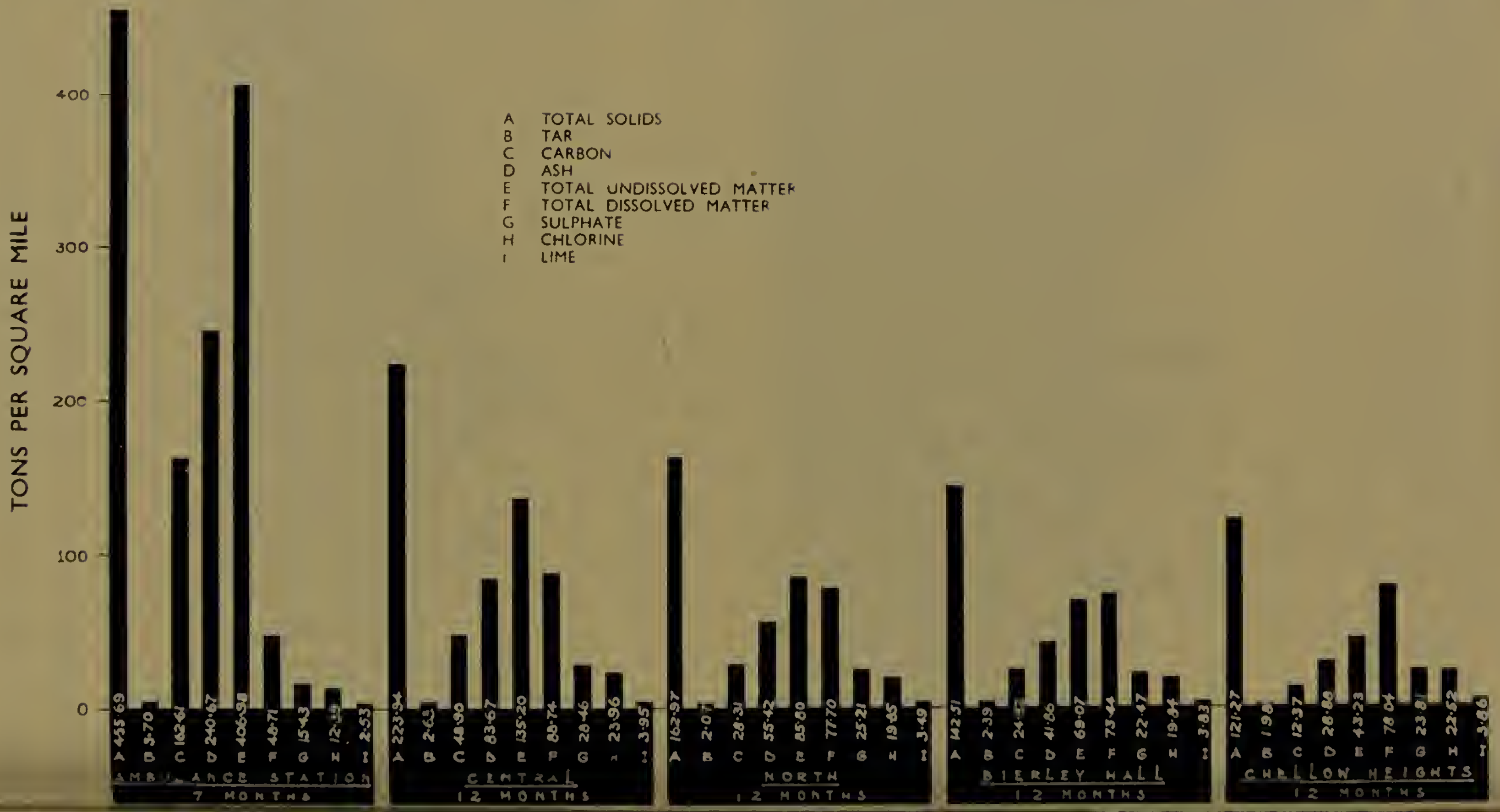
Grit and fly ash, due to a large extent to the large percentage of fines in the coal, still continues to be troublesome in many districts. Where tests could be made which leave no doubt as to the origin of the grit, the owners have been approached and requested to deal with the matter. In several cases re-organisation of plant has been planned and in some cases plant has been ordered, but long-term deliveries are delaying the completion of the schemes.

Owing to difficulties in giving protection to the Deposit Gauge which it had been decided to instal at the Ambulance Station, this gauge was not installed until May of this year. Although the gauge has been in operation for only 8 months of the year under review it shows that the deposits are very much heavier than those of the other districts served by these instruments.

This year the results of the special observation carried out during the holiday week have produced somewhat surprising results, for in all the gauges with the exception of that at the Ambulance Station, there appears to have been a heavier rate of deposit during the holiday week than during the remainder of the month. The results were carefully considered having regard to rainfall, wind direction and velocity here and by the Superintendent of Observations at the Fuel Research

ATMOSPHERIC POLLUTION

ANNUAL DEPOSIT AS MEASURED AT FIVE STATIONS—1950



station, who calculated the average daily rates of deposit in grammes per 100 sq. metres per day, but without an entirely satisfactory explanation.

Further investigations, however, have since been carried out which lead to the conclusion that the more serious substances found in the deposit, i.e., Tar and Sulphur, are very largely contributed by the domestic fire.

As these observations for deposit during the holiday week have only been carried out once before, there is as yet insufficient data for comparison. It is hoped to continue them in future years as by doing so it may be possible to account for the difference in the quantity of carbonaceous matter which is collected on different sites of a similar nature.

The average yearly deposit in the gauge at Bradford Central for the ten years 1931 to 1940 was 310 tons per square mile as against 245 tons for the ten years 1941 to 1950. When it is considered that 15 per cent more coal is being consumed in the industrial furnaces in the city than was consumed before the war, it would appear that owners, engineers and stokers are taking a more intelligent interest in smoke abatement than formerly, and that the evening classes for which some years have been held at the Technical College and attended by stokers and others having the control of boiler and other furnaces are bearing fruit.

Reference to the figures for Bradford North, which is influenced more by domestic coal consumption, shows no such improvement, and reflect the reluctance on the part of so many householders to change to the more efficient and modern smokeless fireplaces. They cling to the so-called cheery, blazing, but nevertheless old fashioned, smoky firegrates which discharge into the atmosphere such a high percentage of tarry matter to the detriment of public health, particularly during foggy weather. If further proof were required of the tremendous contribution which domestic fires make to the general pollution of the atmosphere, reference should be made to the investigations carried out during the Bradford holiday week when most of the factory chimneys were not in operation. There it will be seen that at four of the five stations the daily deposit was higher during the holiday week than during the remainder of the month of August. Whilst much of the heavier deposit, i.e., carbon and ash, might be attributed to the cleaning of boiler flues during the holiday period, the deposit of tar and sulphur can be attributed mainly to domestic chimneys which were brought into use throughout the city during that week because of the extremely inclement weather.

Housing

Before the war it was possible to speak of the work of the Housing Inspectors with enthusiasm and proudly to present figures illustrating the number of houses repaired and brought up to a reasonable standard or, alternatively, wiped from the landscape. It is a very different picture to-day. Now more and more houses are being ascertaine which cannot be repaired at "reasonable cost" within the terms of th Housing Act, 1936, yet the alternative procedure of demolition can be contemplated with only the most dangerous properties. All over th city houses are being inspected with bulged external walls or sagging and perished roofs. The cost of rebuilding an external wall is usually in itself so high that it is not "reasonable" with houses bringing in rents of 4/- to 5/-, and if Section 9 is to be invoked, other expensive items such as new cooking ranges and sinks would have to be included Indeed, the position of this deteriorating property is so grave as to give the conscientious inspector a sense of frustration. Yet this type of property, even when situated in the worst areas of the city, is com manding prices out of all proportion to their value when offered with vacant possession.

Many are the problems brought to the Department concerning the Rent Acts, but often help and advice cannot be given because of lack of information regarding standard rents. Only too often the only guarantee that the rent charged is the "standard rent" is given by the landlord, and it is to be hoped that when the Rent Restriction Acts are amended and consolidated a clear instruction will be given to Local

Authorities to create a register containing the official rent for every habitation in each area which can then be consulted by any interested party.

Housing Inspections

Inspections under parts 2, 3 and 4 of the Housing Act, 1936, were considerably restricted because of the general housing position which is as bad in Bradford as in other parts of the country. Overcrowding is rife, not only amongst the back-to-back houses but even on some Corporation Estates, and the whole problem revolves round the question of alternative accommodation. Many families are living in sub-standard houses which are not worth repairing, and they can only be satisfactorily housed by providing alternative accommodation. It has been necessary to represent properties to the Health Committee for demolition, but this step has only been taken in those cases where in addition to numerous defects the properties were found to be in imminent danger of collapse. In some cases closing orders were made where it was not possible to demolish old properties without affecting adjoining properties, a step we should not have taken before the war. Considerable use has been made of the repair section, Section 9, to enforce a reasonable standard in many dwellings.

Because of the dangerous condition of some external walls and the collapse of the roofs of two houses it was found necessary to represent 22 houses in Carlton and Tumbling Hill Streets as a Clearance Area, and this action has since been confirmed.

Details of the housing statistics will be found in the Appendix.

Because of the lack of accommodation in the city we find that more nd more houses are being let in lodgings, which has resulted in some ersons taking advantage of the hardship of others, and the Department as successfully represented many cases of overcharging to the Tribunal stablished under the Furnished Houses Rent Control Act, 1946. As a sult of the evidence supplied by Inspectors considerable reductions in rent have been obtained. In one case a prosecution was undertaken by the Local Authority, and the defendant was fined £10 on each of three summonses for charging rents in excess of those fixed by the Tribunal, and he was ordered to refund £17 3s. excess rent to the lessees.

Medical Points

Many inspections were made because the points system adopted by the City Council allows for the addition of points on medical grounds. During the year 1,227 medical certificates in support of housing applications were submitted and investigated, 34 per cent being granted additional points.

Rehousing Work

Whilst it had long been the practice to carry out an inspection of vacant Corporation houses on estates build for slum clearance prior to reletting, and also to inspect and disinfest, where necessary, the effects of persons living in houses which were the subject of Demolition or Closing Orders before removal to such houses, it was decided, in November 1949, to carry out an inspection of the effects of all persons who were applicants for tenancies of Corporation Houses when the applicant qualified, under the "points" scheme, for a house. Further, it was decided that an inspection should be made of the houses involved when tenants made application for transfers or exchanges.

To this end, during the year 1950, 1,435 visits were made by the Housing Inspectors. Of these 1,009 inspections were made of the premises occupied by applicants for Corporation houses, and 301 were found to be verminous. The tenants of 185 of these verminous houses were subsequently rehoused, and disinfestation was carried out, in each case prior to removal.

One hundred and sixty-seven inspections were made of houses involved in transfers or exchanges and 1 was found to be verminous 75 inspections were made of unoccupied houses, and 31 were found to be verminous. These houses were disinfested prior to reletting. 18

visits were abortive. In many cases the applicant had gone away without informing the Estate Office of the change of address, or, in the case of transfers, the applicant had suffered a change of mind.

Towards the end of the year some of the Corporation houses in which persons from verminous houses had been rehoused were inspected. This was done in an effort to eradicate any re-infestations. It was most gratifying to find that less than 1 per cent of the houses visited were verminous.

Establishments for Massage and Special Treatment

The Bradford Corporation Act, 1949, came into operation on the st January, 1950, and under part IX of the Act all premises within the City used, or intended to be used, for the reception or treatment of persons requiring massage or chiropody, electric treatment or radiant heat, light, electric vapour or other baths for therapeutic treatment, or other similar treatment, became subject to licensing by the Corporation, and, the Health Committee being empowered to ct, it was decided to make the November meeting of the Committee he annual licensing meeting. Full details of the matter were advertised n four separate occasions in the local press, resulting in a total number f 96 applications being received.

All applications were investigated and all premises involved were nspected by one of the senior sanitary inspectors, who prepared etailed reports as to suitability of premises, equipment, technical ualifications and experience of applicants, and as to the conduct of all stablishments.

Of the total of 96 applications, 89 licences were granted in respect of 5 establishments; 6 applications were withdrawn due to the fact that he applicants had no premises, and 1 application was withdrawn due o the unsuitability of the premises. Investigations were carried out nto 12 suspected cases of persons practising without being licensed, esulting in warning letters being sent in 3 cases; the remaining cases ere found to be not subject to licensing due to the persons concerned aving ceased to practice or not practising in any premises.

It was found unnecessary to institute legal proceedings in any case to the end of 1950.

Action was taken under Section 63 (1) of the Act and byelaws were drawn up regulating the conduct of the business, the keeping of records, the exhibiting of scales of fees, and for the prevention of fraud and immorality in these establishments. The byelaws received the approval of the Council, were subsequently confirmed by the Secretary of State, and come into operation on the 1st January, 1951.

Registered members of the Chartered Society of Physiotherapy are specially exempted from licensing under Section 68 of the Act, providing that a certificate in a form approved by the Corporation and signed by two registered medical practitioners practising or residing in the city, not being in partnership with each other, and not having any financial or other interest in such establishments, to the effect that the person carrying on such establishment is a suitable person, has been lodged with the Corporation.

In three cases of this kind, involving four persons in three establishments, the necessary certificates were lodged, and the persons specified therein became "Registered Members" under the Act.

With regard to the licensed premises, it was generally found that the majority were reasonably appointed, equipped, and staffed with suitably qualified persons for the purpose of the business. In some few cases where premises, equipment and qualifications of the persons practising gave rise to doubts as to the advisability of issuing licences in respect of these establishments, it was found that the applicant had generally been in practice for several years, in some cases as long as 30 years, and in view of this the applicants were licensed after full consideration of the facts by the Health Committee.

It is, however, intended that all new applicants for licences under this part of the Act shall furnish evidence of adequate and proper training, and that the establishments shall be suitably equipped before being recommended for licensing.

Hairdressers and Barbers

Provision was made in the Bradford Corporation Act, 1949 (Section 28) to require the registration of hairdressers and barbers and their premises. When this provision was brought into force during the current year by resolution of the Council, byelaws were made which came into force on the 1st October, 1950. Thus Bradford has become one of the first authorities in the country to make a stand aimed at enforcing the standard of hygiene demanded to-day by every thinking member of the public in the personal services rendered to him in such premises.

The byelaws are divided into three parts: the first part describes the term "premises," the second deals with the hygienic condition of the shop and fittings, and the third covers the personal cleanliness of the staff and all instruments and apparatus used while carrying on the business.

It is a requirement of Section 28 that a copy of the byelaws must be displayed in the registered premises, and thus the public can acquaint themselves with their several provisions and know, for example, that the proprietor must provide a clean towel for every customer. The cleansing of brushes, combs and clippers is made obligatory, the operatives must wear clean garments and cover the customer with clean gowns only, and so on.

From the time when the byelaws became operative on the 1st October, 1950, to the 31st December, 1950, 389 premises were inspected, and with very few exceptions they were found to comply with the requirements of the byelaws. The breaches were of a minor character and were remedied after verbal warnings without recourse to statutory enforcement.

Section 10

Water Supply

Water Supply

Report by Mr. G. F. Renton, B.SC., M.I.W.E., *Water Engineer*

I am indebted to Mr. G. F. Renton, B.SC., M.I.C.E., M.I.W.E., Water Engineer, for the following description of the Bradford Water undertaking.

All the Bradford Waterworks are gravitation works. The water is collected at such levels that it can be conveyed directly into the reservoirs for storage and supply. The sources of supply which are available are therefore more limited in extent than would be the case if the water were lifted from some lower level; but on the other hand the water is more free from pollution, and is softer and of better quality. The district of supply of the Bradford Waterworks is not confined to the City, but includes the following surrounding towns and places, viz.: wholly supplied: Addingham, Burnsall, Denholme, Pudsey, Queensbury and Shelf, and Spenborough; partially supplied: Baildon, Batley (Birstall), Bingley (Cottingley, Crossflatts, Cullingworth, Eldwick, Harden, Micklethwaite, Wilsden), Dewsbury, Morley (Drighlington, Gildersome), Shipley, and Silsden. The levels of the district of supply vary greatly, viz.: from 200 feet above the sea at Apperley Bridge to 1,200 feet above the sea at Queensbury, making a difference of 1,000 feet of elevation to be covered by the distribution of the water.

The supply is given in three separate services, called the high level service, the intermediate level or Nidd service, and the low level service.

The sources of supply for the low level service lie to the north and west of Bradford, in the valleys of the rivers Aire and Wharfe. Various streams, tributaries of these rivers, are taken into the reservoirs and conduits. These streams receive the water from a drainage area of 9,770 acres, 7,550 acres being in the Wharfe Valley, and 2,220 acres in the Aire Valley. There is no storage reservoir in the valley of the river Aire, so that part of the gathering ground cannot, at present, be fully utilised. Only the daily flow of the streams can at any time be taken, and none of the winter flow can be collected for summer use. In the valley of the Wharfe there are three storage reservoirs, viz.: the Upper Barden, the Lower Barden, and Chelker Reservoirs.

The sources of supply for the high level service lie to the west of Bradford, in the valleys of the Denholme Beck and the river Worth, both tributaries of the river Aire. The drainage area of these streams is 2,569 acres, and the lowest level at which water is taken for supply is 1,030 feet above the sea.

The Nidd supply is drawn from the upper reaches of the rivers Nidd and Stone, which have their rise in Little Whernside, at the foot of Great Whernside, one of the spurs of the Pennine Mountain range, which district lies nearly thirty-five miles due north of the City. The water from this source of supply is stored in Angram and Scar House Reservoirs in the upper reaches of the Nidd, and conveyed to Bradford by an aqueduct which intercepts in its course certain streams, tributaries of the river Nidd. The drainage area of these rivers and streams available for the supply of the city is 15,530 acres. Nearly the whole of the gathering grounds from which the water for supply is drawn are high moorlands, above the reach of any pollution from populated districts. They range in elevation from 900 feet to 2,300 feet above the level of the sea.

The total acreage of the drainage areas available for the supply o the town is 27,869 acres, viz.: Low level, Wharfe Valley, 7,550; Aire Valley, 2,220; total, 9,770 acres. High level, Denholme Valley and Worth Valley, 2,569 acres. Intermediate level, Nidd Valley, 15,530 acres. Old Works: Many Wells Springs.

The raw water is typical from moorland catchment areas, being peat-stained with vegetable matter in suspension, and one of its important characteristics is its comparative softness.

In a town where the textile industry is predominant, and such trades as wool-washing, dyeing, bleaching, etc., are carried out, a soft water is absolutely necessary and in the particular case of Bradford is indispensable. The raw water from the moorland catchment at Thornton Moor, for example, is distinctly acid. This acidity is neutralised by the addition of a solution of lime. In the case of the Nidd and Thornton Moor catchments the Corporation has acquired a considerable portion of the drainage area and has restricted agricultural operations as well as limiting persons residing thereon so as to safeguard the supply at the source from pollution.

The water collected from these sources is conveyed to the town by means of masonry and concrete conduits and steel and cast iron pipes. The length of the conduit from the Heaton Service Reservoir, at Bradford, to the Barden Reservoir is eighteen miles, and from the Barden Reservoir to the Sandbed Beck, at Burnsall, the most distant stream taken to the north, four miles. The length of the cast iron main from the Horton Bank Reservoir to the Stubden Reservoir, at Denholme, is five miles, and of the conduits, from the Stubden and Thornton Moor Reservoirs to the Bond Clough, at Haworth, the most distant stream taken to the west, about nine miles. The water from the Nidd Valley is conveyed through tunnels, aqueducts in cut and cover work, nd cast iron and steel pipes. The length from the Scar House Reservoir o Chellow Heights Service Reservoir and Filtration Works is 32·10 miles. The whole of the works so far mentioned are for collecting and upplying water for the use of the city and other towns and places reviously mentioned.

All waters are filtered and sterilised before passing into supply and re tested daily before and after treatment to guard against the possibility of plumbo solvency and the presence of harmful bacteria. Samples f treated water are taken and tested direct from kitchen taps throughout the city.

There are five filtration works dealing with the water supplied to the three levels; at these works purification by slow sand filters or mechanical filtration requiring the addition of sulphate of alumina as a coagulant is practised; sterilisation in all cases is secured by chlorination.

Other reservoirs, with separate drainage areas, amounting to 24,742 acres, have been made for compensation water to the various mills and streams which are affected by the taking of the town supply, viz.: the Grimwith Reservoir, at Hartlington, for giving compensation water for that which is taken from the streams in the valley of the river Wharfe; the Silsden Reservoir, at Silsden, for the low level works in the valley of the river Aire; the Hewenden Reservoir, at Hewenden, for the old supply of the Many Wells Springs; the Doe Park Reservoir at Denholme, for the high level works in the Denholme Valley; the Leeming and Leeshaw Reservoirs, at Oxenhope, for the streams taken in the valley of the river Worth, and the Gouthwaite Reservoir, for the streams taken in the Nidd Valley.

The total storage capacity of the reservoirs is 7,900 million gallons of which 2,900 million gallons are reserved for compensation supplies

Section II

Sewage Disposal

Sewage Disposal

Report by Mr. W. HILLIER, M.ENG., M.I.C.E., F.INST.S.P.,
Sewage Engineer

I am indebted to Mr. W. H. Hillier, M.ENG., M.I.C.E., F.INST.S.P., ewage Engineer, for the following description of sewage disposal.

An efficient system of sewage disposal is a vital factor in maintaining he health of a large community. In Bradford this responsibility is borne by the Sewage Committee, whose duty is to carry out the provisions of the many statutes in force relating to the purification of ewage, the control of the discharge of industrial wastes, and the prevention of pollution in the City's streams and rivers.

The sewage of any city is partly "domestic" and partly "trade" ewage. The domestic sewage is the dirty water run off from the housands of sinks, wash basins, baths and water closets in the city. rade sewage is the waste water from factories and mills, discharged fter it has done its work in various industrial processes. In Bradford he volumes of domestic and trade sewage are about equal, and together hey amount to some sixteen million gallons a day. In times of storm he volume of sewage is greatly increased by the addition of rainwater eaching the sewers through street gullies.

Before modern methods of sewage disposal were adopted, all this aste water was discharged untreated into the streams, giving rise to onditions of appalling filth and smell, and contributing largely to the igh incidence during the nineteenth century of water-borne diseases ch as cholera and typhoid.

Today, the sewage from houses and factories is taken through soundly-constructed drains into the pipe-sewers which run under every street and roadway. These, in turn, connect with larger branch and main sewers, and finally all the sewage of the City is collected into a main outfall sewer leading to the purification works. The network of sewers in Bradford is under the care of the City Engineer's Department, and all new drainage *connections are carefully inspected* before being brought into use.

The larger part, amounting to about 90 per cent, of the City's sewage, is dealt with at the main works at Esholt, situated on the river Aire, about five miles north east of the City centre. A smaller works at North Bierley treats the sewage from the remaining part of the southern area. The main object of the treatment works is to convert the sewage into clean water which can be discharged into the river without causing any nuisance.

Bradford is the world centre of the wool scouring and combing industry, and because of the great volumes of wool fat and dirt washed from the fleeces during scouring, the sewage in Bradford is particularl difficult to treat; indeed, up to the beginning of the present centur it was often described as untreatable. The development, however, o the acid precipitation process, first at the old works at Frizinghall, an subsequently at Esholt, has satisfactorily solved this problem.

The sewage treatment works were largely completed by 1932 afte having cost more than £2,500,000. The main features of the works ar the precipitation plant, the biological filters, and the sludge processin plant. The sewage, reaching the works through a ten feet diamete tunnel, is acidified in order to "crack out" the grease, which is the settled, together with any solid matter, as a sludge in the precipitatio tanks. The top liquid from the tanks is treated biologically on filte beds and is discharged as a clear effluent, quite free from offence, int the river Aire about half a mile upstream of Apperley Bridge.

The grease-containing sludge, after heat and acid treatment, is filter-pressed, the grease thus being separated from the solid residue. This esidue, rich in organic matter, is prepared as a powdered fertiliser, hich has proved particularly valuable in agriculture as it can be uaranteed free from pathogenic bacteria or weed seeds. The Esholt Works is the largest producer of organic fertiliser in the country.

The recovered grease, amounting to some thirty tons a day, which therwise would have gone to pollute the river, is clarified and manu-actured into 14 different products. These are sold to many industries n this country and abroad, and bring in an income amounting to about 250,000 a year.

The processes employed at Esholt are necessarily costly; but ortunately the income from the sale of fertilisers, grease and other y-products goes far towards meeting this heavy cost and thus relieving he burden on the ratepayers. The processes employed are unique and he manufacture of by-products has no parallel anywhere in the world.

It should not, however, be lost sight of that the earning of income a secondary consideration of the Sewage Department; its main nction is to provide one of the most important public health services the City.

Section 12

Public Cleansing and Refuse Disposal

Public Cleansing and Refuse Disposal

Report by Mr. J. W. CALL, M.INST.P.C., *Cleansing Superintendent*

I am indebted to Mr. J. W. Call, M.Inst.P.C., Cleansing Superintendent, for the following description of refuse disposal.

The Cleansing Department is responsible for the collection and disposal of house and trade refuse throughout the City, also for street cleansing operations covering 163 miles of streets within the City, including gully emptying, attention to public conveniences, treatment of icy roads and snow removal. Salvage operations are also carried out and feeding meals are manufactured from offal and garbage at the Hammerton Street Depot. For the abovementioned purposes 359 men and 59 vehicles are engaged.

The refuse collection section maintains a regular routine service in connection with the emptying of dustbins, ashpits, etc., to premises numbering 109,833, and this involves over five million visits per annum. 84 specially-designed refuse collection vehicles, with sliding steel shutters, are regularly engaged upon this work, occupying 141 men. Each vehicle has a compartment and also carries a large bag at the rear or waste paper, which has been kept separate by householders. Two other vehicles are engaged in collecting waste paper only, where this can be obtained in bulk quantities. The total number of loads of house efuse collected per annum is 52,763, the weight of same being 86,867 ons.

Communal bins for the reception of kitchen waste are placed at uitable points throughout the City, this material being separately ollected, sorted and sold to local pig keepers. Two vehicles are engaged on this work. The total weight of kitchen waste collected during the ast financial year was 1,058 tons 8 cwts.

Ninety-four per cent of the City refuse is disposed of by controlled tipping, the remaining 6 per cent being incinerated at the Hammerton Street Destructor. Seven controlled tips are operated, situated in different parts of the City as follows: Odsal Wood, New Grammar School Grounds, Highfield Road, Idle, Dick Lane, Stanacre, Clayton and Thornton.

The scheme at Odsal is of an extensive nature and originally commenced with the construction of the Odsal Stadium, now used by the Bradford Northern Rugby League Football Club and the Odsal Speedway. Operations are continuing through this natural valley, the present scheme being for the construction of a car park, after which a further stadium is visualised. Approximately 17,000 loads of refuse per annum are tipped at this site. The total number of loads tipped at Odsal since the commencement of tipping operations is 546,000.

The objective of controlled tipping operations at the New Grammar School Grounds, Frizinghall, has been for the formation of playing fields. Approximately 18,000 loads of refuse per annum are tipped at this site. A total of 278,700 loads have been tipped since the commencement of the scheme. Controlled tipping is now continuing along the lower level adjoining the railway line and a portion of this land has been allocated for the construction of a new road which is proposed under the Town Planning Scheme.

The Highfield Road quarry was purchased by the Cleansing Department in 1903 as a land reclamation scheme. It was of a considerable depth, and in due course the controlled tipping operations will result in it being brought to the level of the surrounding land. The site may then be used either as a playing field or for agricultural purposes. Approximately 4,500 loads are tipped per annum and a total of 91,200 loads have been tipped at this site since the commencement of operations.

The land at Dick Lane is an extensive site which originally sloped from the road level to a rather considerable depth. The major portion of the site has now been brought up to the level of the road. Approximately 13,000 loads of refuse are tipped per annum and a total of 169,300 loads have been tipped at this site since the commencement of operations.

The remaining schemes referred to above, i.e., Stanacre, Clayton and Thornton tips are lesser projects which are in appropriate localities for the disposal of limited quantities of house refuse in those particular districts. The Stanacre tip overlooks Bolton Road and the principal objective is to improve the outlook, as this land was originally of an unsightly nature and was used as a dumping ground for rubbish by unauthorised persons.

The Bradford system of controlled tipping is well known throughout the British Isles and, indeed, in many parts of the world, and is held as an example to other local authorities by the Ministry of Health as the ideal method. Many deputations are received from other Councils, some from foreign countries, with a view to the method being emulated in their own particular Boroughs.

The method of controlled tipping is carried out in strict conformity with predetermined regulations designed to obviate nuisances of any description and to preclude the possibility of spontaneous combustion. Before tipping operations are commenced the sites are surveyed and levels put out which are carefully followed. The tipping therefore proceeds in an orderly systematic manner in 7 ft. layers with banks at an angle of 40 deg., the refuse being immediately covered with uniform graded black ashes which are obtained from the local electricity works. Salvage operations are carried out on each tip, which involves the sorting of paper, metals, textiles, cardboards, bedding and old tyres. The waste paper is baled at the site. The total number of men employed on the various controlled tips, including salvage operations, is 47.

A three-cell incinerator plant is in operation at the Hammerton Street Works. This deals with a limited amount of house refuse from the immediate vicinity, together with a considerable quantity of trade refuse brought in from various private undertakings in the City. Steam is generated from the burning of the refuse through two multitubular boilers, and this provides heating to the office premises and workshops and is also utilised for the operation of two large steam-jacketted pans for the manufacture of fish meal and other feeding meals. This process has been carried out since early in the present century, and prior to the war the meals were sold as fertilisers, but owing to the national need there is now an urgent demand for its use as a feeding meal. Fish and meat offals, also fruit and vegetable garbage, are collected from the markets and brought to the depot, where they are processed in separate pans according to the nature of the material. The material is fed from a hopper into the steam jacketted pan and steam under pressure is circulated. The material within the pan is agitated by slowly revolving steel arms, which are electrically driven through a central shaft. This steam drying process is completed in approximately five hours, after which the resultant meal is extracted from the pan, spread out to aerate and fed through a bucket elevator system to two disintegrators which break down the meal, the latter being eventually passed through a screen in order to reduce the meal to a fine, even grade. The resultant meals have a high feeding value for pigs and poultry. Recent analyses are as follows:

Fishmeal

Moisture	7·40
Protein	66·80
Oil	6·04
Phosphoric Acid	6·17
Calcium Phosphate	13·48
Nitrogen	10·68
Salt	0·58

"*Kitcheal*" (meal from market garbage)

Moisture	8·87
Protein	26·6
Oil	5·94
Ash	16·20
including sand and siliceous matter	6·20

"*Manipau*" (meal from manifolds and paunches)

Moisture	8·75
Protein	27·7
Oil	15·0
Ash	12·95
including sand and siliceous matter	6·00

With regard to other salvaging activities, it may be of interest to state that since the intensification of these operations early in 1940 the tonnage of material salvaged by the Cleansing Department is 115,948 tons, producing an income of £219,182.

This effort has not only assisted in the national economy but has also provided considerable income towards the cost of the Department. During the last financial year the weights of the material salvaged were:

Waste paper	1,062 tons
Textiles	24 ,,
Non-ferrous metals	2 ,,
Light and heavy scrap	31 ,,
Baled tins	281 ,,
Kitchen waste and bones	1,070 ,,
Fishmeal	97 ,,
Kitcheal	34 ,,
Manipau	30 ,,

Street cleansing operations are carried out by the "beat" system, whereby the area is divided into 60 rounds or "beats." An orderly man with truck is responsible for each "beat" and the material which he sweeps and places into the truck is collected at regular intervals by a refuse-collecting vehicle, three of which are regularly engaged on this work. The main roads are serviced by Lewin mechanical sweeper-collector vehicles and the bye-streets by Lacre sweeping machines. All these machines are fitted with water sprinkler equipment. A system is in operation during the winter months for both day and night service in case of snow-bound or icy roads. Street gullies are cleansed, flushed and disinfected by the use of two 750-gallon capacity mechanical gully-emptying machines. These machines are also fitted with street washing and sprinkler equipment, and are also provided with adaptations for cesspool emptying.

Considerable improvements have been made in public cleansing methods during the past decade, and every effort is made to maintain the highest standard of service in this respect. The modern trend of mechanisation has been a valuable asset in this respect and should provide an impetus for the future.

Appendix

Table I *Vital Statistics of Whole District during* 1950 *and Previous Years*

Year	Population estimated to Middle of each Year	BIRTHS			TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS		NET DEATHS BELONGING TO THE DISTRICT			
		Uncorrected Numbers	NET				of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year of Age		At all Ages	
			Number	Rate	Number	Rate			Number	Rate per 1,000 Net Births	Number	Rate
1944 ..	261,890	4,823	4,645	16·15	4,230	16·16	447	151	249	53	3,934	13·61
1945 ..	262,660	4,313	4,136	15·84	4,169	15·87	423	156	271	65	3,902	14·90
1946 ..	279,040	5,871	5,404	19·39	4,319	14·46	471	135	265	49	4,035	14·4
1947 ..	284,900	6,473	6,334	22·23	4,288	14·73	494	151	380	54	4,439	15·58
1948 ..	288,500	5,599	5,439	18·85	3,871	13·41	467	145	235	43	3,871	13·41
1949 ..	291,600	5,344	5,048	17·3	4,637	15·9	592	178	191	37	4,223	14·50
1950 ..	294,300	5,111	4,906	16.7	4670	15·8	497	153	185	38	4,173	14·2

Table II *Notifiable Infection Diseases*—1950

NOTIFIABLE DISEASE	CASES NOTIFIED IN WHOLE DISTRICT								TOTAL CASES NOTIFIED IN EACH LOCALITY																			
		At Ages—Years																										
	At all Ages	Under 1	1—5	5—15	15—25	25—45	45—65	Over 65	Allerton	Bolton	Bradford Moor	Clayton	East Bowling	Eccleshill	Exchange	Great Horton	Heaton	Idle	Listerhills	Little Horton	Manningham	North Bierley E	North Bierley W	North East	South	Thornton	Tong	West Bowling
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	119	2	1	1	6	20	60	29	2	2	4	12	3	1	5	2	—	10	3	4	3	7	24	8	9	6	3	11
Scarlet Fever	490	5	169	269	35	9	3	—	22	24	38	26	24	31	16	20	25	29	22	19	23	35	46	11	14	27	22	16
Enteric Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Pyrexia	24	—	—	—	12	12	—	—	—	—	3	—	—	—	1	—	—	—	1	8	3	1	1	1	1	2	1	1
Cerebro-Spinal Meningitis	7	4	3	—	—	—	—	—	—	2	—	—	—	1	—	—	—	—	—	—	—	—	1	1	1	1	—	—
Poliomyelitis	52	2	24	12	6	7	1	—	2	3	2	2	2	6	1	1	2	5	2	4	4	4	5	1	1	2	—	3
Opthalmia Neonatorum	20	20	—	—	—	—	—	—	—	—	—	—	2	—	9	—	1	—	—	2	—	—	—	2	4	—	—	—
Measles	3,018	140	1,953	902	10	11	1	1	81	158	173	146	261	199	157	192	119	83	185	176	192	92	135	133	181	58	140	157
German Measles	125	9	67	45	4	—	—	—	2	2	9	8	13	4	1	11	5	—	5	11	5	10	12	6	8	1	2	10
Whooping Cough	1,623	138	1,040	430	6	8	1	—	62	44	102	116	98	95	81	80	95	55	42	81	112	74	80	78	92	73	57	106
Chicken Pox	1,639	56	614	897	42	24	6	—	78	40	46	64	144	27	91	102	55	33	87	89	129	224	104	25	62	9	87	143
Pulmonary Tuberculosis	249	—	7	16	70	94	54	8	10	19	10	6	11	13	8	8	10	6	30	22	15	7	10	12	20	14	5	13
Other forms of Tuberculosis	67	1	10	22	10	16	8	—	1	5	6	2	3	4	2	2	5	—	1	8	3	5	6	2	2	2	3	5
Infective Enteritis	445	116	146	71	22	52	29	9	6	11	4	17	18	10	15	18	14	3	54	91	14	13	55	23	35	5	9	30
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-encephalitis	2	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—
Encephalitis Lethargica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	399	42	74	62	23	50	66	82	8	8	14	13	17	16	13	10	10	12	13	41	11	27	54	36	50	18	5	14
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	574	30	317	162	20	31	7	7	4	5	12	69	17	24	47	40	27	14	67	96	23	7	24	22	18	9	3	37
Totals	8,853	565	4,425	2,890	266	335	236	130	278	323	423	481	618	431	447	504	368	251	512	652	537	506	558	361	408	227	337	546

Table III *Causes of Death at Different Periods of Life during the Year* 1950

Causes of Death	All Ages	under 1	1 to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 and upwards
All Causes												
Typhoid and Paratyphoid			—	—	—	—	—	—	—	—	—	—
Measles	4	—	1	1	1			—	—	—	1	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	9	8	—	1			—	—	—	—	—	—
Poliomyelitis	4	1	—	—	—	2	—	—	—	—	1	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—
Influenza	21	—	—	—	1	—	—	—	2	2	8	8
Encephalitis Lethargica	2	—	—	—	1	1	—	—	—	—	—	—
Meningitis (Non Tubercular)	4	2	2	—	—	—	—	—	—	—	—	—
Cerebro Spinal Fever	2	—	—	—	—	2	—	—	—	—	—	—
Tuberculosis of Respiratory System	92	—	—	—	—	12	16	8	20	19	15	2
Other Tuberculous Diseases	17	1	3	3	1	2	2	1	2	—	2	—
Syphilis	6	—	—	—	—	—	—	2	2	2		—
Cancer, Malignant Disease	663	—	—	1	5	1	2	31	81	90	203	240
Diabetes	35	—	—	—	—	—	—	—	2	6	18	9
Cerebral Haemorrhage, etc.	570	—	1	2	—	—	1	7	31	87	203	238
Heart Disease	1,328	—	1	1	2	6	14	28	89	216	438	533
Other Circulatory Diseases	41	—	—	—	—	1	—	3	5	12	11	9
Bronchitis	267	5	3	—	3	—	2	16	25	60	72	81
Pneumonia (All forms)	146	31	1	5	1	2	4	2	7	12	39	42
Other Respiratory Diseases	6	—	—	1	—	—	—	2	—	—	3	—
Peptic Ulcer	42	—	—	—	—	—	—	2	6	10	8	16
Diarrhœa, etc.	30	21	—	—	—	—	—	—	2	4	3	—
Appendicitis	24	—	1	1	1	1	—	—	3	4	7	6
Cirrhosis of Liver	3	—	—	—	—	—	—	—	2	1	—	
Other Diseases of Liver, etc.	3	—	—	2	—	—	—	—	1	—	—	—
Acute Digestive Diseases	2	—	1	1	—	—	—	—	—	—	—	—
Acute and Chronic Nephritis	58	—	—	—	3	1	—	4	10	8	20	12
Puerperal Sepsis	2	—	—	—	—	—	2	—	—	—	—	—
Other Puerperal Causes	5	—	—	—	—	—	3	2	—	—		
Congenital Debility, Premature Birth, Malformations, etc. . .	109	105	2	1	1	—	—	—	—	—	—	—
Senility	217	—	—	—	—	—	—	—	—	3	25	189
Suicide	34	—	—	—	—	—	2	6	4	11	7	4
Other Violence	100	1	2	3	5	1	10	5	6	10	21	36
Other Defined Diseases	328	10	2	3	—	10	16	10	34	140	76	27
Totals	4174	185	20	26	25	42	74	132	334	697	1181	1458

Table IV *Public Health (Tuberculosis) Regulations* 1930

Summary of Notifications during the period from 1st *January* 1950 *to the* 31*st December* 1950

	NUMBER OF NOTIFICATIONS ON FORM A												
	Primary Notifications												Total Notifications (i.e., including cases previously notified by other doctors)
Age Periods	0 to 5	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upwards	Total	
Pulmonary:													
Males	—	5	4	2	17	17	31	22	24	21	7	150	161
Females	—	2	6	4	14	22	25	16	6	3	1	99	101
Non-pulmonary:													
Males	—	3	5	7	2	3	6	1	5	1	—	33	35
Females	1	7	5	5	1	4	5	4	1	1	—	34	37

Table V *Vital Statistics in Bradford from* 1920

Year	Population	Birth Rate	Death Rate	Zymotic Death Rate	Infantile Mortality Rate
1920	293,979	20·52	13·31	0·42	93
1921	291,100	19·57	13·72	0·66	109
1922	291,300	17·92	14·02	0·36	87
1923	290,800	18·19	13·75	0·48	78
1924	290,200	16·94	14·86	0·31	92
1925	290,200	16·63	13·97	0·65	95
1926	288,700	16·31	13·58	0·47	92
1927	293,200	14·73	14·57	0·52	92
1928	288,500	15·32	13·60	0·38	69
1929	289,200	15·03	15·66	0·50	80
1930	293,254	14·92	13·45	0·44	75
1931	300,900	13·56	14·21	0·24	71
1932	296,300	13·56	13·89	0·26	75
1933	295,100	13·22	14·68	0·32	79
1934	293,650	13·68	13·35	0·34	62
1935	292,200	13·55	14·28	0·38	64
1936	290,500	13·42	14·93	0·43	82
1937	289,510	13·85	14·64	0·34	69
1938	288,700	13·51	13·76	0·26	58
1939	287,500	12·42	14·91	0·19	61
1940	*271,700	12·81	15·85	0·20	68
1941	*270,310	12·35	14·81	0·18	68
1942	*264,800	13·90	13·29	0·20	50
1943	*260,300	14·46	14·43	0·18	58
1944	*261,890	16·15	13·61	0·17	53
1945	*262,660	15·84	14·90	0·19	65
1946	*279,040	19·39	14·46	0·15	49
1947	284,900	22·23	14·73	0·30	59
1948	288,500	18·84	13·41	0·14	43
1949	291,600	17·3	14·50	0·12	37
1950	294,300	16·7	14·2	0·15	38

* Civil Population

Table VI *Infant Mortality*, 1923–50

Year	Deaths under 1 Year of Age per 1,000 Births		
	Total	Diarrhœal Diseases	Total less Diarrhœal Diseases
1923	78	4	74
1924	92	6	86
1925	95	7	88
1926	92	13	79
1927	92	7	85
1928	69	6	63
1929	80	5	75
1930	75	5	70
1931	71	5	66
1932	75	6	69
1933	79	8	71
1934	62	4	58
1935	64	5	59
1936	82	9	73
1937	69	7	62
1938	58	5	53
1939	61	7	54
1940	68	4	64
1941	68	6	62
1942	50	4	46
1943	51	3	48
1944	53	4	49
1945	65	9	54
1946	49	6	43
1947	59	10	49
1948	43	5	38
1949	37	4	33
1950	38	4	34

Table VII *Infant Mortality, 1950. Net Deaths from Stated Causes at Various Ages under 1 Year of Age*

CAUSES OF DEATH	Under 1 Week	1—2 Weeks	2—3 Weeks	3—4 Weeks	Total Under 1 Month	1—3 Months	3—6 Months	6—9 Months	9—12 Months	Total Deaths Under 1 Year
Smallpox	—	—	—	—	—	—	—	—	—	
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	1	4	1	2	8
Diphtheria and Croup	—	—	—	—	—	—	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—		—
Polio Encephalitis	—	—	—	—	—		1	—	—	1
Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—
Tuberculosis of Intestines and Peritoneum	—	—	—	—	—	—	1	—	—	1
Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—
Meningitis (*not Tuberculous*)	—	—	—		—	1	—	1	—	2
Convulsions	—	—	—	1	1	—	1	—	—	2
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	—	—	—	—	1	2	1	1	5
Pneumonia (all forms)	3	—	1	—	4	8	13	5	1	31
Diarrhœa and Enteritis	—	—	—	1	1	9	6	4	1	21
Gastritis	—	—	—	—	—	—	—	—	—	
Syphilis	—	—	—	—	—	—	—	—		—
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	—	—	—		—	—	1	—	1
Atelectasis	7	—	—	1	8	—	—	—	—	8
Congenital Malformations	9	3	4	2	18	4	7	—	1	30
Premature Birth	49	2	2	—	53	—	1	—	—	54
Atrophy, Debility and Marasmus	6	—	1	—	7	3	2	1	—	13
Other Causes	2	1	—	—	3	2	2	1	—	8
All Causes	76	6	8	5	95	29	40	15	6	185

Table VIII *Infant Mortality. Net Deaths from Stated Causes under 1 Year of Age from* 1941

Causes of Death	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Chicken-pox	—	—	—	—	—	—	—	—	—	—
Measles	1	3	2	1	2	—	3	2	2	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—
Whooping Cough	4	8	5	5	—	3	3	3	1	8
Diphtheria and Croup . .	—	—	1	—	2	1	—	—	—	—
Erysipelas	—	—	—	—	—	—	—	—	—	—
Polio Encephalitis . .	—	—	—	—	—	—	—	—	—	1
Tuberculous Meningitis . .	2	1	—	1	3	—	1	2	2	—
Abdominal Tuberculosis . .	—	—	1	—	—	—	1	—	—	1
Other Tuberculous Diseases	—	1	—	—	—	—	2	—	—	—
Meningitis (not tuberculous)	2	2	3	1	2	1	4	1	5	2
Convulsions	8	10	7	9	6	4	4	3	—	2
Laryngitis	—	—	—	—	—	—	—	—	—	—
Bronchitis	14	9	6	7	10	4	7	4	4	5
Pneumonia (all forms) . .	32	27	46	45	49	38	74	44	36	31
Diarrhœa and Enteritis . .	21	17	14	17	41	25	64	27	19	21
Gastritis	—	1	—	—	1	—	—	—	—	—
Syphilis	1	—	—	—	1	—	—	—	—	—
Rickets	—	—	—	—	—	—	—	—	—	—
Suffocation (overlying) . .	2	—	—	1	1	1	7	23	5	1
Atelectasis	6	8	11	6	10	15	12	6	13	8
Congenital Malformations	31	19	17	19	19	57	57	35	33	30
Premature Birth	82	57	58	88	64	80	77	66	47	54
Atrophy, Debility and Marasmus	5	11	11	14	18	6	24	16	17	13
Other Causes	27	23	27	31	34	18	14	4	7	8
Total . .	242	206	213	249	271	265	380	235	191	185

Table IX *Cases of Poliomyelitis* 1947—1950

Ward	1947	1948	1949	1950	Total 1947–50	Persons per acre	Attack rate per 1,000 population
Idle	3	–	2	7 **(1)**	12 **(1)**	3·7	1·11
Thornton	4 **(1)**	1	1	2 **(1)**	8 **(2)**	4·2	·674
Tong	5	–	1	–	6	4·7	·420
North Bierley East ..	7	–	2 **(1)**	4	13 **(1)**	5·1	·920
Clayton	2	–	–	2	4	5·6	·320
Allerton	1	–	2	2	5	6·3	·336
Bolton	5	1	1 **(1)**	3	10 **(1)**	11·6	·823
Eccleshill	5 **(1)**	–	2	6	13 **(1)**	13·5	·652
North Bierley West ..	3	–	1	5 **(1)**	9 **(1)**	15 0	·514
Heaton	6	1	–	3	10	16·5	·614
Great Horton ..	6	1	3 **(1)**	1	11 **(1)**	19·1	·675
West Bowling ..	4	1	4 **(2)**	3	12 **(2)**	19·4	·729
East Bowling ..	8	–	4 **(1)**	2	14 **(1)**	24·9	·983
North East	1	1	2	1	5	25·3	·265
Listerhills	5	–	1	2	8	28·4	·540
Exchange	6	–	–	1	7	30·0	·541
South	6 **(1)**	1	–	1	8 **(1)**	33·5	·575
Bradford Moor ..	3	1	3 **(1)**	2	9 **(1)**	37·8	·545
Little Horton ..	4	–	–	4	8	40·1	·618
Manningham.. ..	2	–	–	5	7	40·5	·468
Totals ..	86 **(3)**	8	29 **(7)**	56 **(3)**	179 **(13)**		

Deaths in dark type

Table X *Summary of Work Executed in Factories and Workplaces* 1950

Summary of Work Executed	Factories	Work-places
No. of Additional W.Cs. provided	80	40
No. of Additional Urinals provided	33	
No. of Obsolete Urinals renewed	3	—
No. of Existing Conveniences Provided with:		
(1) Sufficient Ventilation	85	8
(2) Intervening Ventilation Spaces	86	10
(3) Notices indicating sex of user	60	7
(4) Effective Screening	2	—
(5) Separate Approaches	10	3
(6) Effective Lighting by (day)	11	3
(7) Effective Lighting by (night)	187	19
No. of Conveniences in connection with which:		
(1) (*a*) Top and walls were white-washed, colour-washed or otherwise cleansed	130	8
(*b*) Surfaces were painted, renewed or satisfactorily cleansed	117	29
(2) Sanitary fittings were repaired	9	—
(3) General repairs to structure were carried out	23	—
(4) Drains, soil pipes, ventilating shafts were repaired or renewed	40	20
(5) Drains were cleansed	5	—
(6) Drains were amended or reconstructed	41	20
(7) New drains were provided	116	41
Drain Testing:		
No. of Colour Tests—P	26	8
N	132	36
No. of Volatile Tests—P	7	—
N	6	1
No. of Smoke Tests—P	4	2
N	30	2
No. of Hydraulic Tests—P	—	—
N	—	—
Works Executed in Compliance with Provision of the Act enforced by H.M. Inspector, but supervised by the Local Authority:		
No. of Wash Basins; Troughs or Fountains provided:	163	
No. of Wash Basins provided in workplace	—	35

Table XI *Average Results of Analyses for Plumbo-Solvency of Water as Distributed*

	Grains per Gallon	
	Lead	Lead taken up to 24 hours
Thornton Moor Water Supply:		
45 samples before 8 a.m.	0·0000	0·0312
samples after 1 p.m.	0·0000	0·0344
Intermediate Level Supply:		
samples before 8 a.m.	0·0000	0·0431
samples after 1 p.m.	0·0000	0·0415
Low Level Water Supply:		
samples before 8 a.m.	0·0000	0·0463
samples after 1 p.m.	0·0000	0·0487

Table XII *Annual Deposits* 1942–50 *Tons per Square Mile*

Year	Total Solids	Undissolved Matter Soluble in CS2 (Tarry Matter)	Undissolved Matter Insoluble in CS2 (Combustible Matter)	Ash	Sulphate as SD4″	Chlorine as Cl′	Lime as Ca**
North							
1942	201·50	2·78	23·81	67·45	25·39	21·75	4·36
1943	173·72	6·13	17·50	34·91	25·83	26·57	7·49
1944	201·22	5·35	19·75	36·48	30·71	32·83	10·88
1945	194·91	3·60	36·12	40·34	29·31	19·96	7·90
1946	157·63	4·05	20·40	31·48	36·17	24·43	8·31
1947	214·10	2·96	36·31	74·52	29·13	17·56	3·37
1948	166·39	3·46	23·76	38·04	21·20	16·14	1·76
1949	177·48	2·71	28·29	39·93	32·40	18·97	3·49
1950	162·97	2·07	28·31	55·12	25·21	19·80	3·49
Central							
1942	278·64	4·41	45·86	101·43	28·44	27·15	6·70
1943	234·77	6·42	36·20	70·88	26·40	24·82	8·58
1944	246·00	6·83	35·77	68·91	29·03	35·14	9·04
1945	276·86	3·82	53·35	80·20	34·34	23·20	8·61
1946	255·92	5·30	40·01	78·89	42·34	32·61	6·05
1947	232·00	4·25	45·41	81·11	31·20	22·11	5·26
1948	233·28	3·65	44·33	75·15	30·58	23·73	3·53
1949	222·77	2·89	37·46	60·27	38·00	24·51	4·53
1950	223·94	2·63	48·90	83·67	28·46	23·96	3·95
Bierley Hall							
1950	145·51	2·39	24·22	41·36	22·47	19·34	3·83
Chellow Heights							
1950	121·27	1·98	12·37	28·88	21·81	22·52	3·86
Ambulance Depot (7 Mos.)							
1950	455·69	3·70	102·61	240·62	18·43	12·39	2·53

Table XIII *Mean Monthly Deposits for* 1950 *Tons per Square Mile*

Station	Total Solids	Undissolved Matter Soluble in CS2 (Tarry Matter)	Insoluble in CS2 (Combustible Matter)	Ash	Sulphate as SD4″	Chlorine as Cl′	Lime as Ca**
North	13·58	·19	2·32	4·61	2·10	1·65	·29
Central	18·66	·21	4·07	6·97	2·37	1·99	·32
Bierley Hall	11·87	·19	2·06	3·48	1·87	1·65	·31
Chellow Heights	10·80	·16	1·03	2·40	1·98	1·87	·32
Ambulance Depot (7 Mos.)	65·09	·52	23·25	34·37	2·20	1·77	·36

Table XIV *Results of Inspections and Actions under Food and Drugs Act, 1938, and Shops Act, 1950*

Complaints investigated	48
Notices served	153
Informal letters sent	176
Notices complied with	116
Food and Drugs Act, Section 13 Contraventions:	
(*a*) Sanitary conveniences in direct communication with food room amended	8
(*b*) Drains in food premises	1
(*c*) Walls, ceiling, floors and windows and doors repaired	423
(*d*) Walls, ceilings and doors cleansed	1083
(*e*) Sleeping rooms directly connected to food premises abolished	9
(*f*) Ventilation improved	6
(*g*) Refuse removed and floors cleansed	73
(*h*) Cleanliness of clothing and apparatus abated	17
(*i*) Hot water, wash basins, soap and towels provided	498
Industrial canteens visited	348
Details of work executed:	
Water closet apartments lighted or ventilated	4
Water closet apartments cleansed	22
Water closet pedestals cleansed	9
Water closet general repairs	34
Water closet pedestals renewed	9
Water closet flushing apparatus amended	3
Waste water closets converted to W.C.	2
Soil pipes renewed	4
Waste water closets abolished	2
Choked drains cleansed	22
Drains amended	15
Drains reconstructed	3
Waste pipes trapped	3
Sinks renewed	192
Refuse bins provided	5
Urinals cleansed	1
Urinals amended or screened	17
Verminous premises dealt with	7
Prevention of Damage by Pests Act, 1949	4
Other nuisances	63
Drain Testing:	
Number of Volatile Colour and Smoke Tests—Positive	20
Number of Volatile Colour and Smoke Tests—Negative	69
H.M. Inspector's reports investigated	3
Reports to H.M. Inspector	3

Table XV

Trade	Grading at present time "A"	"B"	Graded from "B" to "A" "C" January 1950
Bakers	328	27	25
Butchers	419	32	132
Confectioners	212	16	28
Fish, Fruit and Game . .	388	56	59
Grocers	1,020	129	193
Public Houses	330	59	45
Restaurants and Cafes . .	304	29	23
Tripe	31	—	—
Ice Cream and Drinks . .	9	—	—
Fish Friers	277	19	238
Potato Crisp Manufacturers	5	—	1
Industrial Canteens	261	77	82
Clubs	119	33	
Sweets	170	23	
School Dining Rooms and Kitchens	121	—	
School Nurseries	25	—	
Day Nurseries	8	—	

Table XVI *Inspections and Contraventions under the Shops Act,* 1950

Number of shops on register	7,106
Number of shops visited where assistants are employed	1,084
Number of shops visited where young persons are employed	234
Total number of inspections	6 695

Nature of Offence	No. of Cases	No. of Warnings
Shops Act, 1950:		
Prescribed form relating to half holiday of assistants not displayed	120	120
Correct meal times not allowed to assistants	—	—
Half holiday not allowed to assistants	1	1
Notice of day of weekly half holiday not fixed	37	37
Shop open after closing hour on weekly half holiday	14	14
Hawking on weekly half holiday after hour fixed by Order	1	1
Shop open after closing hour fixed by Closing Order	26	26
Selling in places after closing hour	20	20
Official copy of Closing Order not displayed in shop	—	—
Notices not displayed in mixed shops after closing hour	24	24
Hours of Closing		
Shop open after closing hour	14	14
Sunday Trading Restrictions		
Shop open for non-exempted sales	—	—
Notices not displayed stating purpose for which shop open	41	41
Without Form VII	—	—
Assistants employed on more than three Sundays in a month	—	—
Assistants not allowed a compensatory holiday	—	—
Young Persons		
Abstract relating to young persons not displayed. Forms H and J	35	35
Young persons employed more than 48 hours per week	4	4
Young persons employed in shop after being employed in factory for permitted hours	—	—
Without Schedule of Young persons hours—Form F	27	27
Without overtime record—Form G	—	—
Without notice relating to seats—Form K	92	92
Young persons employed overtime in excess of yearly limit	—	—
Overtime worked by young persons in more than 6 weeks	—	—
TOTALS	474	474

TABLE XVII *Result of Legal Proceedings in the City Court*

Statute	Number of Summonses issued	Fines imposed	Costs awarded	Work done subsequent to service of summons but before hearing		Remarks
		£ s. d.	£ s. d.	Without Costs	Costs Awarded	
Section 93	45	18 10 0	26 13 6	15	7	
Section 93	45	18 10 0	26 13 6	15	7	17 Nuisance Orders made by Court
Section 83	6	3 10 0	1 9 0	1	2	One defendant put on probation for 12 months. Two Orders made by Courts.
Section 52	3	2 10 0	—	—	—	
Factories Act, 1937	1	—	3 3 0	—	1	
Shops (Sunday Trading) Act, 1936	2	2 10 0	—	—	—	—
Food and Drugs Act, 1938	1	3 0 0	2 2 0	—	—	—
Furnished Houses Rent Control Act, 1946	1	30 0 0	—	—	—	To refund £17/3/0 overcharge
Bradford Corporation Gas and Improvement Act, 1871	1	15 0 0	10 0	—	—	Breach of Closing Order
Bradford Corporation Act, 1949	1	5 0 0	2 2 0	—	—	Selling bug-infested furniture

Table XVIII *Table showing Number of Samples Procured and Examined in* 1950

Nature of Sample	Number Submitted	Statutory Sample		Informal Sample	
		Genuine	Adulterated	Genuine	Adulterated
Andrews Liver Salts	1	—	—	1	—
Antacid Tablets	1	—	—	1	—
Aspro	1	—	—	1	—
Baked Sponge Flour Mixture	1	—	—	1	—
Baking Powder	13	—	—	12	1
Barley Kernels	2	—	—	2	—
Barlova Malted Milk	1	—	—	1	—
Beef Sausage	20	1	—	18	1
Beef Suet	6	—	—	6	—
Bicarbonate of Soda	1	—	—	1	—
Bilberries	1	—	—	1	—
Bisto	1	—	—	1	—
Blackcurrant Tonic	1	—	—	1	—
Blancmange Powder	1	—	—	1	—
Borax	1	—	—	1	—
Bovril	1	—	—	1	—
Brawn	2	—	1	—	1
Broth	1	—	—	1	—
Bubbly Gum	1	—	—	1	—
Butter	3	—	—	2	1
Butter Caramels	1	—	—	1	—
Candied Peel	1	—	—	1	—
Chocolate Spread	1	—	—	1	—
Cocoa	4	—	—	4	—
Coffee	7	—	—	7	—
Coffee and Chicory Essence	7	—	—	7	—
Coffee, Chicory and Sugar Essence	1	—	—	1	—
Coffee Extract	2	—	—	2	—
Composition Essence	1	—	—	1	—
Compound Pepper Condiment	1	—	—	—	1
Condensed Milk	3	—	—	3	—
Cooked Meat	1	—	—	1	—
Cooking Fat	2	—	—	2	—
Cough Mixture	2	—	—	2	—
Crawfish	2	—	—	2	—
Creamola	1	—	—	1	—
Cream Doughnut	1	—	—	1	—
Creamy Whip	1	—	—	1	—
Dandelion Coffee Essence	1	—	—	1	—
Ecclescake	1	—	—	1	—

Table XVIII *contd.*

Nature of Sample	Number submitted	Statutory Sample		Informal Sample	
		Genuine	Adulterated	Genuine	Adulterated
Edible Olive Oil B.P.	1	—	—	1	—
Egg Custard	1	—	—	1	—
Epsom Salts	1	—	—	1	—
Fish Cakes	2	—	—	2	—
Fruit Tart	1	—	—	—	1
Gelatine	3	—	—	3	—
Glycerine, Honey and Ipecac.	1	—	—	1	—
Golden Raising Powder	2	—	—	2	—
Grape Nuts	1	—	—	1	—
Grape Syrup	1	—	—	1	—
Ground Almonds	1	—	—	1	—
Ground Cinnamon	1	—	—	1	—
Ground Ginger	1	—	—	1	—
Ground Rice	1	—	—	1	—
Horlicks Tablets	1	—	—	1	—
Ice Cream	84	—	—	71	13
Invalid Butter Toffee	1	—	—	1	—
Iodine	1	—	—	1	—
Jam	7	—	—	7	—
Laxative Oil	1	—	—	1	—
Lemonade	1	—	—	1	—
Licorice, Menthol and Violet Pellets	1	—	—	1	—
Limeade	1	—	—	1	—
Lime Candy	1	—	—	1	—
Liquid Paraffin	1	—	—	1	—
Luncheon Meat	2	—	—	2	—
Malted Milk	1	—	—	1	—
Malt Vinegar	2	—	—	2	—
Margarine	2	—	—	2	—
Marmalade	1	—	—	1	—
Mayonnaise	1	—	—	1	—
Meat Paste	8	—	—	8	—
Meat Pie	35	1	—	33	1
Milks	743	80	23	628	12
Mince Pasty	1	—	—	1	—
Mince Pie	1	—	—	1	—
Mincemeat	3	—	—	3	—
Mixed Spice	1	—	—	1	—
Mustard	3	—	—	3	—
Mustard Sauce	1	—	—	1	—
Nippits	1	—	—	1	—

Table XVIII *cond.*

Nature of Sample	Number submitted	Statutory Sample Genuine	Statutory Sample Adulterated	Informal Sample Genuine	Informal Sample Adulterated
Oil of Almonds, Violets and Squills	1	—	—	1	—
Ovaltine Tablets	1	—	—	1	—
Pepper	3	—	—	3	—
Phensic Tablets	1	—	—	1	—
Pickled Beetroot	1	—	—	1	—
Polony	2	—	—	2	—
Pork Sausage	22	1	—	17	4
Potato Crisps	1	—	—	1	—
Potted Meat Paste	2	—	—	2	—
Potted Beef Paste	1	—	—	1	—
Potted Meat	14	—	—	13	1
Potters Catarrh Pastilles	1	—	—	—	1
Pressed Beef	1	—	—	1	—
Pressed Pork	1	—	—	1	—
Pressed Beef and Veal	1	—	—	1	—
Pure Australian Honey	1	—	—	1	—
Quinine Tonic Water	1	—	—	1	—
Raising Powder	1	—	—	1	—
Rheumatic Mixture	1	—	—	1	—
Rice	1	—	—	1	—
Rose Hip Syrup	1	—	—	1	—
Rum	1	1	—	—	—
Rum Cup (containing real rum)	1	—	—	1	—
Saccharin Tablets	1	—	—	1	—
Sage	1	—	—	1	—
Sage and Onion Stuffing	2	—	—	2	—
Salad Cream	11	—	—	11	—
Sausage	57	2	—	49	6
Salmon Paste	1	—	—	1	—
Sausage Roll	2	—	—	2	—
Seidlitz Powder	1	—	—	1	—
Self Raising Powder	7	—	—	7	—
Soup	2	—	—	2	—
Sparkling Orange Crush	1	—	—	1	—
Special Blood Elixir	1	—	—	1	—
Steak Pie	1	—	—	1	—
Stomach Tablets	1	—	—	1	—
Sugar	2	—	—	2	—
Sweetened Condensed Milk	2	—	—	2	—
Sweets	3	—	—	3	—
Tea	12	—	—	12	—
Tarts	5	—	—	5	—
Tin of Corned Beef	1	—	—	1	—
Tomato Ketchup	2	—	—	2	—
Tongue Paste	2	—	—	2	—
Vinegar	4	—	—	4	—
Whisky	10	10	—	—	—
Total	1218	96	24	1054	44

Table XVI *Feeding Stuffs Samples*

Dairy Nuts	2
Dairy Meal	1
Cow Ration	1
Milk Maintenance Meal	1
Calf Nuts	2
High Protein Nuts	1
Pig Meal No. 1	2
Pig Fattening Meal	1
Battery Pellets	1
Poultry Balancer	1
Battery Mash	1
Chick Pellets	1
Poultry Layers Pellets with Cod Liver Oil	1

Table XVII *Fertilisers Samples*

All Blood Fertiliser	5
Bonemeal	2
General Fertilizer	1
Liquinure	1
Muriate of Potash	1
Sud Cake	1
Superphosphate of Lime	1
Sulphate of Ammonia	1
Soluble Blood Manure	2
Sulphate of Potash	1

Sanitary Inspections.

Table XXV *Particulars of Work done* 1946–50

Routine Visits and Inspections:	1946	1947	1948	1949	1950
No. of Houses inspected under Public Health Acts	8,994	9,627	6,515	6,755	6,393
No. of Houses in respect of which notices were served requiring defects to be remedied	3,058	3,434	3,052	2,958	2,497
No. of Houses where defects remedied after formal notice:					
(*a*) By owners	3,451	2,695	3,039	2,195	2,344
(*b*) By L.A on default ..	301	232	358	335	194
No. of ordinary visits	28,408	25,437	23,347	23,611	25,448
No. of Houses rendered fit without service of formal notices ..	951	1,231	1,047	875	831
Inspections and Visits:					
No. of complaints investigated ..	3,960	4,704	4,073	3,726	3,968
No. of ordinary visits and inspections (other than dwelling-houses) ..	2,970	1,858	1,826	2,181	1,933
No. of Factories and Workshops visits and inspections	76	265	246	349	99
No. of Offensive Trade Premises visits and inspections	91	104	121	140	152
No. of Schools inspected	50	114	96	148	124
No. of Graveyards inspected ..	5	26	10	1	2
No. of visits to Common Lodging Houses	58	212	96	160	107
No. of Houses let in lodgings visited	19	2	7	2	13
No. of Canal Boats inspected ..	—	—	—	—	—
No. of Cinemas visited	63	69	48	32	52
No. of Piggeries visited	3	5	29	26	29
Drainage and Sanitary Arrangements:					
Choked drains cleansed	685	571	588	633	732
Drains amended	266	220	273	243	256
Drains reconstructed	306	202	330	424	353
Extra drains provided	75	98	123	124	204
Cellars drained	12	4	3	6	9
Drains underneath houses abolished	4	7	7	3	3
Drainage systems intercepted from sewer	5	3	7	10	10
Open drain inlets trapped	4	5	9	12	15
Waste pipes trapped	42	47	42	45	68
Waste pipes disconnected	45	44	43	44	83
Rainwater pipes disconnected ..	42	25	70	81	72

Table XXV *contd.*	1946	1947	1948	1949	1950
Rainwater conductors repaired or renewed	442	1,065	889	750	860
Sinks repaired or renewed	99	124	187	273	306
No. of Houses reported for provision of Water Closets	33	34	63	97	108
Water closet pedestals renewed	102	143	210	96	108
Water closets and flushing apparatus repaired	190	178	234	205	205
Water closets cleansed	9	19	26	24	21
Water closet apartments cleansed and lime-washed	11	6	25	44	15
W.C. apartments properly lighted and ventilated	29	9	18	15	13
General repairs to water closets	351	387	391	339	314
Additional W.C. accommodation provided	74	72	85	103	101
Soil pipes repaired and renewed	30	48	70	61	48
Indoor soil pipes abolished	2	1	—	—	—
Privy apartments cleansed and lime-washed	3	—	—	1	1
Privy structures abolished	3	—	—	3	5
Deposits of slops in ashpits prohibited	—	—	—	2	—
Ashpits abolished	4	7	13	5	—
Dust bins repaired and renewed	1,708	1,115	1,071	668	—
Houses provided with new dust bins	586	176	212	45	—
Urinals cleansed, amended, or screened	23	8	9	11	5
Urinals remodelled	2	1	1	1	1
New urinals provided	1	1	—	—	1
Dwelling-houses, etc.:					
Dampness excluded	424	496	699	610	836
Roofs repaired	410	881	706	516	788
Houses or parts cleansed and lime-washed	22	13	23	31	32
Verminous houses dealt with	85	58	85	81	97
Ventilation improved	34	28	35	38	47
Windowcords repaired or renewed	398	280	674	1,016	1,235
Lighting improved	10	3	10	16	8
General repairs executed	1,261	1,364	2,109	2,377	2,541
Kitchen ranges repaired or renewed	165	131	213	246	234
Washing coppers provided or renewed	29	37	48	68	60
Handrails provided	6	2	3	2	2

Table XXV *contd.*	1946	1947	1948	1949	1950
New food stores provided and ventilated	7	1	—	10	—
Water supply improved	104	108	110	140	166
Houses supplied with water	—	4	6	2	—
Outbuildings repaired	3	5	2	13	9
Overcrowding abated	—	—	—	—	20
Cellar areas cleansed	1	1	—	3	—
Courts, Back-yards, Stable-yards, etc.:					
Yard and passage paving repaired	13	35	48	36	34
Yards repaved	4	2	11	6	14
Yards and passages newly paved	2	1	—	2	—
Yards cleansed	16	8	9	12	9
Passages cleansed and limewashed	1	—	—	—	—
Manure pits repaired	—	—	—	1	1
Manure pits provided	—	—	—	—	—
Keeping of Animals, etc.:					
Improper keeping of swine prohibited	1	—	—	2	2
Piggeries repaired	—	—	—	—	—
New piggeries provided	—	—	1	1	—
Piggeries abolished or disused	2	—	—	—	2
Improper keeping of fowls, etc., prohibited	13	8	15	21	15
Accumulations of offensive matter, etc., removed	39	42	47	71	56
Accumulations of manure removed	9	3	3	3	3
Infectious Diseases:					
No. of Zymotic Diseases investigated	1,006	1,104	1,170	969	1,317
Drain Testing:					
Number of volatile tests:					
Positive	48	35	82	69	75
Negative	655	655	810	723	740
No. of colour tests:					
Positive	200	152	280	294	249
Negative	1,011	958	1,231	1,335	1,383
Number of smoke tests (Rocket):					
Positive	14	16	29	38	32
Negative	17	31	68	88	75
Miscellaneous Nuisances:					
Dangerous places referred to City Engineer	58	83	49	80	73
Dangerous places made secure	47	30	46	36	36
Choked Street Gulleys reported	71	76	99	103	91
Wastes of water reported	60	102	56	57	46
Samples of water taken for:					
(*a*) Chemical Analysis	237	111	154	218	26
(*b*) Bacteriological Examination	312	361	249	371	38
Offensive Trades	—	—	—	—	—
Effluvium Nuisances abated	7	1	13	8	1

The specialised work called for under the Factories Act 1937, the Food and Drugs Act 1938, etc., was carried out by specialist inspectors as follows:

Table XXVI

FACTORIES

Inspections for Purposes of Provisions as to Health, Including Inspections made by Sanitary Inspectors

Premises	Number on Register	Inspections	Number of	
			Written Notices	Occupiers Prosecuted
FACTORIES in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	288	204	12	—
FACTORIES not included in (i) to which Section 7 is enforced by Local Authorities	2,416	1,055	56	—
Other PREMISES in which Section 7 is enforced by Local Authorities (excluding outworkers' premises) ..	2,731	1,259	68	—

Table XIX *Meat Inspection. Carcases Inspected and Condemned*

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	4,096	12,290	13,644	39,507	4,865
Number inspected	4,096	12,290	13,644	39,507	4,865
All Diseases except Tuberculosis:					
Whole carcases condemned	7	14	494	138	118
Carcases of which some part or organ was condemned	411	5,814	20	1447	810
Percentage of number inspected affected with disease	10·2	47·4	3·77	4·00	19·00
Tuberculosis only:					
Whole carcases condemned	40	253	6	—	20
Carcases of which some part or organ was condemned	710	2,842	14	—	410
Percentage of number inspected affected with Tuberculosis (approx.) ..	18·3	25·2	0·16	—	8·84

Table XX *Whole Carcases and Offal Condemned* 1949

	Bulls	Cows	Bullocks	Heifers	Calves	Sheep	Pigs
Decomposition (general) ..	—	2	—	—	11	2	9
Dropsy (general)	—	2	—	—	2	45	8
Emaciation	—	5	—	—	11	84	1
Erysipelas (acute swine) ..	—	—	—	—	—	—	8
Fever (acute)	—	1	—	—	1	1	60
Immaturity	—	—	—	—	138	—	9
Jaundice	—	—	—	—	51	—	3
Pyæmia	—	—	—	—	261	—	2
Septicæmia	—	11	2	—	2	1	10
Tuberculosis	—	254	10	31	5	—	16
Bruising..	—	1	—	—	1	—	1
Melanosis	—	—	—	—	1	—	—
Parasites	—	—	—	—	—	1	—
Totals..	—	276	12	31	484	134	127

The condemnation of partial carcases and organs are shown in the following table :—

Table XXI *Partial Carcases and Organs Condemned* 1950

		Partial Carcase	Lungs	Heart	Stomach and Intestine	Liver	Pluck	Udder	Head
Abcess ..	Beasts	12	83	—	S. 42 I. 91	1130	—	30	61
	Sheep	9	—	—	—	220	60	—	5
	Calves	—	—	—	—	—	—	—	—
	Pigs	3	—	—	—	—	—	—	14
Inflammatory Conditions	Beast	—	79	38	S. 37 I. 79	32	—	105	—
	Sheep	1	—	—	—	—	48	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	6	—	—	140	—	2	—	—
Parasitic Conditions	Beast	—	170	—	S. — I. 320	3,206	—	—	—
	Sheep	1	—	—	1	1,407	209	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	—	—	—	72	—	21	—	—
Tuberculosis	Beast	45	2,757	87	S. 170 I. 1018	750	—	60	406
	Sheep	—	—	—	—	—	—	—	—
	Calves	—	—	—	—	—	14	—	—
	Pigs	1	—	—	65	163	180	—	72
Miscellaneous	Beast	38	76	8	S. 30 I. 110	20	—	—	[illegible]
	Sheep	13	—	—	—	—	—	—	—
	Calves	—	—	—	—	—	—	—	—
	Pigs	36	—	—	24	15	19	—	10

ble XXII *Total Weight of Meat Condemned* *Home Killed*

Beef Carcases	147,764 lb.
Partial Carcases	7,791 lb.
Sheep Carcases	3,954 lb.
Partial Carcases	377 lb.
Calf Carcases	14,092 lb.
Pig Carcases	10,751 lb.
Partial Carcases	1,020 lb.
	185,749 lb.

Imported Meat and Other Goods

Beef	1,900 lb.
Mutton	61 lb.
Bacon and Ham	248 lb.
Danish Udders	2 lb.
Corned Beef	875 lb.
Total	3,086 lb.

Weight of Offals Condemned

Beef	81,326 lb.
Sheep	3,369 lb.
Calves	2,939 lb.
Pigs	5,895 lb.
Total	93,529 lb.

Total weights of meats condemned: 282,364 lb., or approx 126 tons

Table XXIII *Various Condemned Foods*

	tons	cwts.	qrs.	lbs.
Apples	2	—	1	12
Bacon	—	1	3	6
Beans	—	12	2	—
Beetroot	—	13	1	—
Bread	1	11	—	12
Butter	—	—	2	15
Cabbage	7	8	—	—
Carrots	1	1	2	—
Cauliflower	7	1	1	—
Celery	—	1	—	2
Dry Fish	—	16	2	—
Dried Fruit	—	—	2	17
Fats	—	6	3	2
Flour	—	12	—	16
Lettuce	2	2	1	18
Onions	1	19	2	—
Parsnips	3	14	—	—
Peas	6	15	2	4
Pears	—	1	3	4
Potatoes	8	15	—	—
Rabbits	—	6	—	10
Radishes	—	8	2	18
Soft Fruits	—	2	2	4
Shellfish	3	4	—	14
Sugar	—	1	2	17
Sprouts	3	8	3	—
Swedes	9	8	2	—
Tomatoes	—	18	—	14
Watercress	—	5	—	25
Wet Fish	7	2	1	16
Total	71	1	3	2

Table XXIV *Condemned Tinned Goods*

	No. of Tins
Meat	2,991
Fish	602
Milk	3,774
Vegetables	3,324
Soup	532
Jam	650
Fruit	1,660
Miscellaneous	747
Total	14,280

Defects Found

Particulars		Number of Defects				Number of cases in which Prosecutions were instituted
		Found	Remedied	Referred to H.M. Inspector	Referred by H.M. Inspector	
ant of cleanliness		8	6	—	4	—
vercrowding		—	—	—	—	—
nreasonable temperature		5	3	—	11	—
adequate ventilation		1	1	—	1	—
effective drainage of floors		2	—	—	1	—
Sanitary accommodation	insufficient	4	17	—	5	—
	unsuitable or defective	4	123	—	37	—
	not separate for sexes	2	1	—	4	—
her Offences (Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factory and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937.)		46	33	11	40	—
TOTALS		72	184	11	103	—

Table XXVI

Outworkers' List, Section 110

Nature of Work	Lists received from Employers						Notices served, etc.	Outwork in infected premises	Prosecutions failing to send in forms
	For six months ending February 1950			For six months ending August 1950					
	Lists	Outworker Contractor	Outworker Workmen	Lists	Outworker Contractor	Outworker Workmen			
Wearing Apparel:									
(1) Making, etc.	58	87	130	54	99	140	—	—	—
(2) Cleaning and washing									
Furniture and Upholstery	3	4	1	3	4	1	—	—	—
Curtains and Furniture Hangings	6	4	4	6	2	4	—	—	—
Household linens	1	5	2	1	7	2	1	—	—
Umbrellas	1	1	—	—	—	—	—	—	—
Weaving (Burling)	68	169	698	67	169	522	—	—	—
Fur Pulling	—	—	—	1	3	—	—	—	—
Making or repairing of sacks	—	—	—	—	—	—	—	—	—
Lampshades	—	—	—	1	—	5	—	—	—

Table XXVII

Housing Statistics 1950

1.	The number of houses which on inspection were considered to be unfit for human habitation	436
2.	The number of houses the defects in which were remedied in consequence of informal action by the Local Authority or their officers	38
3.	The number of representations made to the Local Authority with a view to:	
	(*a*) the serving of notices requiring the execution of works or	311
	(*b*) the making of demolition or closing orders	67
4.	The number of notices served requiring the execution of works	191
5.	The number of houses which were rendered fit after service of formal notices	345
6.	The number of demolition or closing orders made	67
7.	The number of houses in respect of which an undertaking was accepted under sub-section (2) of section 19 of the Housing Act, 1930	1
8.	The number of houses demolished	216
9.	Number of dwellings overcrowded on 1st January, 1949	1,610
10.	Number of houses becoming overcrowded between 1st January, 1949 and 31st December, 1949	91
11.	Number of houses decrowded between 1st January, 1949 and 31st December, 1949	127
12.	Number of overcrowded houses on 31st December, 1949	1,574